Etmullerus Abridg'd:

OR,

A Compleat Syſtem of the Theory and Practice of Phyſic.

BEING A

DESCRIPTION

OF

All Diſeaſes Incident to Men, Women and Children.

WITH

An Account of their *Cauſes*, *Symptoms*, and moſt approved methods of *Cure*, both *PHYSICAL* and *CHIRURGICAL*.

To which is prefix'd a ſhort View of the Animal and Vital Functions; and the ſeveral Vertues and Claſſes of Med'cines.

Tranſlated from the laſt Edition of the Works of *MICHAEL ETMULLERUS*, late Profeſſor of Phyſic in the Univerſity of *Leiptſich*.

A BOOK very proper for Families.

The Second Edition, Corrected and much Improv'd.

LONDON:
Printed for *Andrew Bell* at the *Croſs Keys* and *Bible* in *Cornhil*, near *Stocks-Market*, and *Richard Wellington*, at the *Dolphin* and *Crown*, at the Weſt-end of St. *Paul*'s Church-yard. 1703.

C

BRITISH MUSEUM

THE TRANSLATOR's PREFACE.

SInce Practical Sciences are infinitely more useful to mankind, than the most curious speculations; Doubtless, *the* Practice of Physic *may justly claim the same Privilege, with respect to its Theoric Companions.* Anatomy, Chymy, Botany, *and the whole Circle of Sciences that retain to* Physic, *are only serviceable when they conspire to improve a regular and safe* Practice. *When they carry on any different design, their Positions are deservedly neglected as idle and useless curiosities. The only plea they can make, is, the diversion and entertainment of a few whose Heads are turned that way. Whereas the advantage and benefit of the World is the result of Practical Truths.*

Upon this account, I chose to abridge Etmullerus *his* Practice of Physic, *as being the center and substance of all his Performances. The choice was determined by the advantage which accrues to the Theory in being applied to Practice, and backed by Experience, without which no Argument is good; in being delivered in such a method as must naturally ingross all its useful and instructing Part, and leave out what is only calculated for diversion and pleasure. This, 'tis restored to its natural tendency, and stamp with an inviting*

BRITISH MUSEUM

THE TRANSLATOR's PREFACE.

SInce Practical Sciences are infinitely more useful to mankind, than the most curious speculations; Doubtless, *the* Practice of Physic *may justly claim the same Privilege, with respect to its Theoric Companions,* Anatomy, Chymy, Botany, *and the whole Circle of Sciences that pertain to* Physic, *are only serviceable when they conspire to improve a regular and safe* Practice. *When they carry on any different design, their Positions are deservedly neglected as idle and useless curiosities. The only plea they can make, is, the diversion and entertainment of a few whose Heads are turned that way. Whereas the advantage and benefit of the World is the result of Practical Truths.*

Upon this account, I chose to abridge Etmullerus *his* Practice of Physic, *as being the center and substance of all his Performances. The choice was determined by the advantage which accrues to the Theory in being applied to Practice, and backed by Experience, without which no Argument is good; in being delivered in such a method as most naturally engross all its useful and instructing Part, and leave out what is only calculated for diversion and pleasure. This, restored to its natural tendency, and stamp with an inviting*

Character. 'Tis cleared of the crimes that are charged upon frivolous niceties, and recommended to the World as a substantial and necessary part of Physic.

Had this method been always followed, it had prevented a great many Inconveniences; as it will appear by the following instances. Most of our courses of Practice are stuffed with the nauseous repetition of ineffectual Med'cines. Their unexperienc'd Authors deliver their mistaken notions as a standing Rule, and with an assuming Air pretend to dictate to Experience. So great is the Self-sufficiency of a teeming Brain, and such is the consequence of that unhappy distinction between the Theory of Diseases and Actual Practice; by this means various Sects arise, their respective Votaries become Physicians by Ecchо, and form their precarious methods from the Placita of Opinionative Men: The most solid and useful Positions are misconstrued, or wrangl'd away; and plain Practice is confronted by vain fancies, or run down by the humour and byass of a Party.

On the other hand, a certain set of Men, disoblig'd by the stiffness of the speculative Tribe, and their small regard to Experience, have chose to lay aside all the advantages of (even useful) Theory, and trust wholly to the conduct of an ignorant experience. Thus Med'cines, that in a few singular instances have been crowned with success, are recommended as infallible in all Diseases of the like form. Whereas, were these Empyric Pretenders acquainted with the various causes of the same effect, and the peculiar Constitutions of Men, they would be able to single out the particular cases in which their Med'cines are proper, and second 'em with solid Reasons. But they foolishly disdain the least Tincture of Knowledge; they boldly decry what they do not understand, and with a successful impudence impose upon a credulous World.

Now the result of all, is, that a happy conjunction of speculative and experimental Knowledge, is the only remedy of the Inconveniences that cramp a regular Practice. And 'tis in great measure accomplished in the following sheets. Here the orderly Scheme of the functions of the

Body,

Body, the general Classes and Vertues of Medicines, and their forms of Prescription, are briefly accounted for, in a few Preliminary Chapters. Here the Reader will meet with the Spirit and Perfection of Practice, supported by all the useful discoveries of Anatomy, and Chymy, and a judicious account of the Materia Medici. Here the nicest Philosopher will find entertainment answerable to his humor, and the meanest Empyric, will be accomodated with suitable instruction. Our Author omits nothing that may promote the grand design. He reasons with the manly force and dexterity of a Philosopher, and yet stoops to the meanest stroke of unaccountable Experience. He weighs all the Instances of Quack Cures, even Sympathy it self he pays a difference to, and chooses rather to check the most refined reason, than controul matter of fact. He traces the Ancients to their earliest date, and omits no piece of Modern Discovery. He reconciles the Experience of former Ages, with the improvements of latter Authors. He unites the jarring Hypotheses of Willis, Sylvius and Helmont, and makes 'em conspire to illustrate and embellish an uniform Practice.

In the division of Diseases he chooses to follow the most natural method, in ranking 'em with the functions of the Body, and fetching in the straglers to the place where their cause is lodg'd. In this he was obliged to depart from the ordinary measures of our Common Place Writers, who split Diseases as their effects vary, and multiply 'em according to the number of their Symptoms, By so doing he avoids the inconvenience of charging our memories with multiplyed figures, that may be compassed by one method. As for instance, he fetches the cause of all Chronical Diseases from the Stomac; and with one blow cuts off the preposterous plea of obstructions in the Bowels, and a numberless train of Symptoms. Nay, he penetrates into the hidden source of most of our Northern Diseases; and by accounting for that lopps off a great deal of unnecessary Practice: As it appears by his method of curing Childrens Distempers; which has already met with a welcome reception from the English World.

But, 'tis a needless piece of formality, to anticipate the Reader's Curiosity with a Character of the Book or Author. His Name is an ample recommendation. His Works (in the Language of the Learned) have been received both here and abroad, with the unanimous approbation of the best Judges; and have justly Entitled him to the Character he bears in the Title-Page of their last Edition at Amsterdam, *viz.* Practicus per Omnem Europam Celeberrimus. *His* Practice of Physic *is doubtless the compleatest now extant: As being so admirably fitted for all the Measures of Theory and Practice. 'Tis countenanced by* Anatomy, *improved by* Chymy, *distinguished in the Minutest Circumstances, warranted by Experience, and finished to the last Degree. His* Method *is* Easy; *The* Causes *he assigns to Diseases are* Natural, *his* Reasons *Convincing, his* Proofs *Solid, his* Cautions *Seasonable, his* Observations *Just, his* Experiments *true, his* Vouchers *Men of Credit, his* Medicines *nicely prepared, and all his* Compositions *admirably well Contrived. In a word, every Period of his Writings may furnish us with convincing Proofs of his Infinite* Reading, *clear* Apprehension, *solid* Judgment, *large* Experience, *and unsullyed* Integrity.

As for the Abridgment, or Translation; I shall neither trouble the Reader nor my self with any Apology for it. If the Imperfections are only such, as, the hurry of the Press, the injunctions of Booksellers, the limited number of sheets, and the common plea of oversights may account for, I have some Title to bespeak forgiveness of the Reader. If it be justly charged with grosser faults, I can offer no difence that's sufficient.

T H

THE CONTENTS OF THE INTRODUCTION.

SECT. I. Of the general Vertues of Med'cines. p. 3

Sect. II. Of the Vital Functions of the Body. 5

Sect. III. Of Acid, Alcalin, Pituitous, and Serous *Cacochymies*, or Corruptions of the Juices in the Body. 12

Sect. IV. Of the Med'cines that evacuate the corrupt Juices of the Body. 16

Chap. I. *Of Vomiting Med'cines.* Ibid.
Chap. II. *Of Purging Med'cines.* 23
Chap. III. *Of the Med'cines that provoke Urine.* 33
Chap. IV. *Of the Med'cines that procure Sweat.* 36

Sect. V. Of the Animal Faculty. 38

Sect. VI. Of the Choice of Practical Authors. 41

The Contents of the first Book.

SECT. I. Of the Appetite, and the disorders 'tis Obnoxious to. p. 43

Chap. I. *Of the loss of Appetite.* 44
Chap. II. *Of the Depravation of the Appetite.* 51
Chap. III. *Of an Immoderate, or Dog-Hunger.* 53

Sect. II. Of the disorders of Thirst. 55

Chap. I. *Of Immoderate Thirst.* 56

Sect. III. Of Diseases relating to the Chewing Faculty. 59

Chap. I. *Of the Contorsion of the Muscles of the mouth, or a* Dog Cramp. Ibid.
Chap. II. *Of the Loss, Corruption, Blackness, Looseness, Numness and Chilness of the Teeth.* 61

Sect. IV. Of the Diseases that hinder swallowing. 64

Sect. V. Of the hindrances of Chilyfication. 66

Chap. I. *Of Diseases incumbring, or extinguishing Chylification.* Ibid.
Chap. II. *Of Wind in the Stomac or Guts.* 70

Sect. VI. Of the Diseases that hinder the Retention of Food in the Stomac. 74
Chap. I. *Of a Vomiting and loathing of Meat.* Ibid.
Chap. II. *Of a Vomiting of Blood.* 78

Sect. VII. Of Pains in the Stomac. 80

Sect. VIII. Of disorders hindring the due separation of the Chyle from the Excrements in the Guts. 85

Sect.

Sect. IX. Of the disorders relating to the Expulsion of the Excrements by Stool. 87

Chap. I. *Of the Diseases which impair the Evacuation by Stool.* Ibid.
Art. I. *Of Costiveness.* Ibid.
Art. II. *Of the Iliac Passion.* 90
Chap. II. *Of the Diseases which enlarge the quantity of Excrements voided by Stool.* 99
Art. I. *Of a Looseness.* Ibid.
Art. II. *Of the Disease call'd* Cholera. 100
Art. III. *Of a* Lienteria. 102
Art. IV. *Of the Looseness call'd* Cœliaca. 104
Chap. III. *Of Depravations relating to the Expulsion of Excrements by Stool.* 105
Art. I. *Of a Dysentery, Tenesmus, Hepatic Flux, And Itching of the Anus.* Ibid.
Art. II. *Of the Piles.* 113

Sect. X. Of Worms in the Guts. 117

Sect. XI. Of pains in the Guts, and particularly of the Cholic. 119

Sect. XII. Of the vicious Postures of the Guts. 127

Chap. I. *Of Ruptures.* Ibid.
Chap. II. *Of the Downfalling of the Anus.* 130

Sect. XIII. Of the Encumbrances of the Chyle in its Passage from the Guts. 131

Sect. XIV. Of Diseases relating to the Lungs and Organs of Respiration. 134

Chap. I. *Of Inspiration Abolish'd, or Suffocation.* 135
Chap. II. *Of Inspiration Depravd, or difficult breathing.* 136
Art. I. *Of Asthma's.* Ibid.
Art. II. *Of a Hiccough.* 142
Art. III. *Of the Night-mare.* 144
Chap. III. *of disorders relating to Exspiration.* 145
Art. I. *Of Immoderate Sneesing.* Ibid.
Art. II. *Of disorders of the Voice.* 146
Art. III. *Of a Cough.* 148

Art.

Art. IV. *Of a choaking Catarrh.* p. 155

Sect. XV. Of the Accidents that disturb the tranformation of the Chyle, and fermentation of the Blood. 158

Chap. I. *Of Fevers in general.* 159
Chap. II. *Of Intermitting Fevers.* 168
Chap. III. *Of Continual Fevers.* 191
Chap. IV. *Of slow Fevers.* 205
Art. I. *Of Catarrh Fevers, or such as proceed from the Lymph, separated in the round Globe-like Glandules.* Ibid.
Art. II. *Of Fevers preceeding from the Lymph of the Conglomerated Glandules, or such as are roll'd into a Cluster.* 208
Chap. V. *Of malignant Fevers.* 215
Chap. VI. *Of the Small Pox and Measles.* 225
Chap. VII. *Of the Plague and Pestilential Fevers.* 233

Sect. XVI. Of disorders relating to the Blood's motion from the Heart to the outer Parts. 241

Chap. I. *Of the Palpitation and trembling of the Heart.* 242
Chap. II. *Of Swoonings.* 246

Sect. XVII. Of Nutrition. 250

Chap. I. *Of a Consumption and Phthisic.* 251
Chap. II. *Of Immoderate Nutrition, or Corpulency.* 260
Chap. III. *Of a Depravd Nutrition.* 262
Art. I. *Of a Cachexy, Leucophlegmacy and Anasarca.* Ibid.
Art. II. *Of an Universal Dropsie.* 265
Art. III. *Of the Yellow, Black and White Jaundice.* 274
Art. IV. *Of the French Pox.* 278
Art. V. *Of the Hypocondriacal and Scorbutical Diseases.* 286
Art. VI. *Of Breakings-out in the Skin.* 306

Sect. XVIII. Of Diseases hindring the regular Reflux of the Blood to the Heart. 353

Chap. I. *Of Inflammations.* Ibid.
Art. I. *Of a Quinsey, Thrush and Falling of the* Uvula, *or Palate of the mouth.* 355
Art. II. *Of Inflammations of the Stomac, Guts and Fundament.* 360

Art.

The Contents.

Art. III. *Of Inflammations of the Meſentery, Sweet-bread and Caul.* 362
Art. IV. *Of Inflammations of the internal Parts of the Breaſt; and particularly of a Pleuriſie and* Peripneumonia. 364
Art. V. *Of Inflammations and Ulcers of the Liver and Spleen.* 370
Art. VI. *Of Inflammations and Ulcers of the Kidneys.* 373
Art. VII. *Of Inflammations and Ulcers of the Bladder.* 375
Art. VIII. *Of a Phrenſy, or Inflammation of the Membranes of the Brain.* 376
Art. IX. *Of the Genuine and Spurious Inflammations of the Eyes.* 377
Art. X. *Of Inflammations and Ulcers in the Ears.* 382
Chap. II. *Of the Effuſion of Blood into the Cavities of the Body, and particularly of an* Empyema. 383
Chap. III. *Of a Bleeding, or the burſting of the Blood Veſſels.* 388
Art. I. *Of Bleeding at the Noſe and Gums.* 393
Art. II. *Of a ſpitting of Blood.* 394

Sect. XIX. Of Diſeaſes relating to the Alterations of the Blood in the Spleen, Liver and Kidneys. 397

Chap. I. *Of Diſtempers relating to the ſeparation of Serum in the Kidneys.* 399
Art. I. *Of an* Iſchuria *in the Kidneys, or a Suppreſſion of Urine ariſing from the want of adue ſeparation in the Reins.* Ibid.
Art. II. *Of the Stone in the Kidneys.* 402
Art. III. *Of a Diabetes, or exceſſive Flux of Urine.* 410
Art. IV. *Of a piſſing of Blood.* 412
Chap. II. *Of Diſeaſes relating to the Expulſion of Urine from the Bladder.* 414
Art. I. *Of a total ſuppreſſion of Urine, ariſing from its ſtay in the Bladder.* Ibid.
Art. II. *Of the Stone in the Bladder.* 416
Art. III. *Of the Incontinence of Urine.* 417
Art. IV. *Of a Strangury.* 419
Art. V. *Of a Dyſuria, or heat of Urine.* 420

Sect. XX. Of Diſeaſes relating to the ſeparation of Lymph in the Glandules, and its regular motion. 421

Art.

Art. I. *Of a Catarrh.* 422
Art. II. *Of a* Coryza. 425

The Contents of the second Book.

SECT. I. Of the Diseases which disturb the Generation and Distribution of the Animal Spirits, and consequently the due performance of sense and motion. 427

Chap. I. *Of Immoderate Watchings.* 429
Chap. II. *Of excessive sleep.* 432

Sect. II. Of the External Senses. 437

Chap. I. *Of Diseases relating to the Eyes.* 438
Chap. II. *Of the disorders of the Ears.* 448
Chap. III. *Of the sense of feeling, and the disorders 'tis obnoxious to.* 453
Art. I. *Of Pain in general.* 454
Art. II. *Of sharp tearing Pains in the Joynts.* 456
Art. III. *Of the Tooth-Ach.* 458
Art. IV. *Of the Ackes of the Eyes.* 460
Art. V. *Of Pains in the Ears.* 461
Art. VI. *Of Head-Aches.* 462
Art. VII. *Of Arthritic Pains.* 468
Chap. IV. *Of the disorders of the Sense of Tasting.* 473
Chap. V. *Of the disorders of the sense of smelling.* 476

Sect. III. Of the disorders of the internal Senses and Animal Functions. 479

Chap. I. *Of a swimming in the Head and Preternatural Commotion of the Spirits in the Brain.* Ibid.
Chap. II. *Of the Irregular Incursions of the Spirits into the External Parts.* 484
Art. I. *Of Alternate Convulsions, and the Epilepsie or Falling Sickness.* Ibid.
Art. II. *Of a Cramp, or continu'd Contraction.* 494

Art. III. *Of Trembling.* 496
Chap. III. *Of the diseases in which the Animal Spirits cease to move.* 498
Art. I. *Of an Apoplexy.* Ibid.
Art. II. *Of Particular Apoplexies.* 509
Art. III. *Of a Palsy.* 512
Chap. IV. *Of the deficiency of Rational Operations.* 521
Art. I. *Of the defect of Memory and Stupidity.* 522
Art. II. *Of doating, or Deliriums in general.* 525
Art. III. *Of Deliriums arising from Internal Causes, viz. Phrensies, Melancholly and Madness.* 526
Art. IV. *Of Deliriums from External Causes.* 541

The Contents of the Third Book.

Of the Diseases peculiar to the Male Sex.

SECT. I. Of the disorders of the Genital Liquor in Mens Bodies. 546

Chap. I. *Of the defect or insufficiency of the Genital Liquor in Men.* 547
Art. I. *Of the Inflammation of the Testicles.* 550
Art. II. *Of a* Pneumatocele, *or distention of the Stones by Wind.* 551
Art. III. *Of a* Hydrocele, *or Collection of Water within the Membranes of the Stones.* 552
Art. IV. *Of the Schirrous swellings of the Stones.* 553
Art. V. *Of a* Sarcocele, *or fleshy swelling of the Stones.* 554
Art. VI. *Of the Distention of the Spermatic Veins, or* Hernia Varicosa. 555
Chap. II. *Of the Irregular Ejaculation of the Seed.* Ibid.
Art. I. *Of a running or Involuntary Emission of the Genital Liquor.* Ibid.
Art. II. *Of the over-hasty Ejaculation of the seminal matter.* 560
Art. III. *Of the over-slow Ejaculation of the seminal matter.* Ibid.

Art.

Art. IV. *Of Caruncles in the Yard, hindring the Ejection of Seed.* 561

Sect. II. Of disorders relating to the Erection of the Yard. Ibid.

Chap. I. *Of Impotency, or the defect of Erection of the Yard.* 562
Chap. II. *Of the Immoderate Erection of the Yard.* 563
Chap. III. *Of the Depravation of the Erection of the Yard.* 565

The Contents of the Fourth Book.

Of Diseases peculiar to Women.

SECT. I. Of the disorders of the Menstrual Flux. 567

Chap. I. *Of the deficiency of the Terms.* 568
Chap. II. *Of the Immoderate Flux of the Terms.* 573
Chap. III. *Of the depravation of the Menstrual Flux.* 576
Art. I. *Of uneasiness attending the Menstrual Flux.* Ibid.
Art. II. *Of the lesser quantity of the Monthly Flux.* 578
Art. III. *Of the Flux of the Terms by drops.* Ibid.
Art. IV. *Of several other defaults of the Terms.* Ibid.
Chap. IV. *Of the Whites, or White Flux.* 580

Sect. II. Of the disorders of Women, relating to the Venereal Appetite. 582

Chap. I. *Of the loss of Virginity.* Ibid.
Chap. II. *Of the depravation of the Venereal Appetite.* 583

Sect. III. Of the disorders of the whole Body suppos'd to proceed from the Womb. 586

Chap. I. *Of the Green Sickness.* Ibid.
Chap. II. *Of a Cachexy in Women.* 587
Chap. III. *Of the Hysteric Passion.* 588

Sect. IV. Of the disorders of Women denying Admission to Men. 593

Chap. I. *Of the downfalling of the Womb.* Ibid.
Chap. II. *Of the Inflammotion of the Womb.* 594
Chap. III. *of Ulcers in the Womb and Vagina.* 495

Sect. V. Of disorders relating to Conception. Ibid.

Sect. VI. Of the Conduct of big belly'd Women. 600

Sect. VII. Of disorders relating to Child-birth. 603

Sect. VIII. Of the Management of Women in Child-Bed. 608

Sect. IX. Of disorders relating to Suckling. 615

The Contents of the Fifth Book.

Of the Diseases of Children. 620

The Contents of the Sixth Book.

Of Surgery. 632

CHAP. I. *of Tumors.* 633
Chap. II. *of Wounds.* 646
Chap. III. *of Ulcers.* 653
Chap. IV. *of Dislocations.* 659
Chap. V. *of Fractures.* 661
Chap. VI. *of a Gangrene, or Sphacelus.* 663

Advertiſements.

THE Whole Works of that excellent Practical Phyſician, Dr. *Thomas Sydenham.* Wherein not only the Hiſtory and Cures of Acute Diſeaſes are treated of, after a New and Accurate Method; but alſo the ſhorteſt and ſafeſt way of curing moſt Chronical Diſeaſes. The Third Edition, Corrected from the Original Latin, by *John Pechey*, M. D. of the College of Phyſicians in *London.*

The Family Phyſician, or a Collection of choice, approved and experienced Remedies, for the Cure of almoſt all Diſeaſes incident to Human Bodies, whether Internal or External; uſeful in Families, and very ſerviceable to Country People. The Firſt Volume. Containing ſome hundreds of conſiderable Receipts and Secrets of great value, with Obſervations of great Cures. Together with the true *Engliſh* Wine Cellar, or the right Method of making *Engliſh* Wines, or *Metheglin*: With a Collection of the choiceſt and ſafeſt Coſmetick Remedies for preſerving the Beauty and Complection of Ladies, never before publiſh'd. By *George Hartman* Phylo Chymiſt, who Liv'd and Travell'd with the Honourable and Renown'd Sir *Kenelm Digby*, in ſeveral parts of *Europe*, the ſpace of Seven Years, till he died.

A General Treatiſe of the Diſeaſes of Infants and Children Collected from the beſt Practical Authors. By *John Pechey* of the College of Phyſicians in *London.*

The Diſeaſes of Women with Child, and in Child-bed: As alſo the beſt means of helping them in Natural and Unnatural Labours. With fit Remedies for the ſeveral Indiſpoſitions of Newborn Babes. To which is prefix'd an Anatomical Treatiſe. All Illuſtrated with divers fair Figures, Correctly Engraven in Copper. A Work much more perfect than any now extant in *Engliſh*, and very neceſſary for Chirurgeons and Midwives practiſing this Art. Written in *French* by *Francis Mauriceau.* Tranſlated by *Hugh Chamberlen*, M. D. The Third Edition Corrected.

An Account of the Breeding of Worms in Human Bodies; their Nature, and ſeveral Sorts; their Effects, Symptoms, and Prognoſtics. With the true Means to avoid them, and Medicines to cure them. By *Nicholas Andry*, M. D. of the Faculty of *Paris.* With Letters to the Author on this Subject, from M. *Nicholas Hartſoeker* at *Amſterdam*, and M. *George Baglivi* at *Rome.* Approved by Dr. *Fagon*, Chief Phyſician to the King of *France*, and by the whole Faculty of the Phyſicians of *Paris.* Done from the *French* Original, with Figures.

AN ABRIDGEMENT OF ETMULLERUS's *Practice of Physic*, &c.

THE *INTRODUCTION.*

HAving undertaken to compile a System of Physic, I am oblig'd, in the first place, to distinguish the *Common* and *Ordinary* Practice from that which is *Uncommon* and *Extraordinary*. The former is, as yet, very Lame, by reason of the Scarcity of mical and Anatomical Experiments; which occasions our rance of the Radical Causes of Diseases, and leaves on- me occasional Symptoms to build the Theory upon: is it less deficient in Generous and Proper Remedies, h might effectually accomplish the Design, with less nce and Torture to the Stomach; such as *Paracelsus*, *ont*, and other noted Chymists have distinguish'd them- s by.

The *Extraordinary Practice* differs from the former both in the Nature of its Remedies, which are all *Arcana's* tho' otherwise never so common: And in the manner of their Operation, which is generally perform'd by Sympathy, Inchantment, or some such secret way. But I shall now confine my self to the *Ordinary* Practice, which I endeavour to make as perfect and compleat as possible, both in its conformity to Chymical and Anatomical Observations, and in the choice of Genuine and Proper Remedies.

I propose to discourse of All Diseases incident to Human Bodies: And in Tracing every Disease, shall observe the following method.

First, To give the *History* of the Disease, the Manner of its Invasion, and the *Signs* which generally accompany it.

Secondly, to describe the *Part affected* whether mediately, by being influenc'd from another; or immediatly, by the Residence of the *Morbific Cause* within its self.

Thirdly, The *Causes* of every Distemper, both *Radical* and *Occasional*.

Fourthly, What *Prognostics* we can have of the Event of every Distemper.

And, *Fifthly*, To subjoyn the Method of Cure, both General and Special; the Nature of the Remedies, whether Simple or Compound, Universal or Specific: Together with Historical Cases, and Practical Observations applied to every Disease.

But some things are necessary to be premis'd, before we launch into the Practice.

Whoever would understand it thoroughly must be well acquainted with the Principles of *Chimistry* and *Mechanicks*. The former are serviceable in explaining the Vital Functions of the Body, and the latter in the Animal Musculary Motion: For Nature has acted Geometrically in framing our Bodies, as well as in every thing else.

The remaining Preliminary Principles that a Student ought to know, before he Commence the Practice of Physic, are briefly couch'd under the following Heads.

SEC

SECT I.

Of the General Vertues of Medicines.

AS the Oeconomy of Man's Body is only explicable by the different forms, sizes, and various Combinations of the Minute Particles, of which every Body is compounded, according to the principles of *Mechanism*: So the Vertues of Medicines may best be deduc'd from the same Cause: Especially since Occult Qualities are now hiss'd out of doors; and the four first Elementary Principles of *Cold*, *Hot*, *Dry* and *Moist*, are more Imaginary than Real. This Particular Disposition and Texture of Parts, that entitles all Medicines to their Respective Specific Qualities, is Originally owing to the Seed; and may properly be call'd the *Seminal Disposition*. As for example, Scurvygrass is a *Specific* against the Scurvy; not because it is Hot, or enjoys such an Occult Quality; but because it enjoys such a Texture of Parts, that makes it a subtle penetrating Body, fit for altering and subduing the Acid Scorbutic Matter. Now its precise *Seminal Vertue* is not Common to all its parts, but peculiar to a sharp Volatil Salt, couch'd within its Body, that actuates the other Earthy Particles. And indeed the Various Exaltation, or Depression of Acid or Alcali Salts, is the distinguishing Character of all their respective Textures; because the Saline Particles are more active, and produce more notable effects than any of the rest; though it's probable all of 'em Originally may have sprung from Water.

Thus, such Medicines were by the Ancients accounted *Hot*, as by their sharp pointed Particles affect the Tongue and Palate, the same way as fire is wont to do; or by vertue of a Volatil Oyly Salt, dissolve the Mass of Blood and augment its Fermentation. Such are all Acid or Nitrous Medicines. Those they call'd *Dry*, which either drink up the moisture of the Body, as burnt Harts-horn, *&c.* or open a Door for its Passage, as all *Sudorifics*. Those *Moist*, that either supply moisture, as all Nourishing and Liquid Things; or put a stop to its Consumption, as Quieting, Pacific Medicines.

All Medicines fit for Conquering a prevailing Acid, or Alcali, in the first Passages, were by the Ancients call'd *Aperitive*. I choose rather to Christen 'em *Alterative*. If they are *Anti-Acids*, they perform their Task by imbibing the peccant Acid; as Steel, and all Earths; or qualifying its sharpness, as Oyly fat Medicines; or fermenting with it, so as to work it into a third Compound, as all Alcali's, both Fix'd and Volatil. If their business be to conquer Alcali's, they reduce the Bile, or any other Vicious Alcali, to its true Temperature, by opposing themselves to their Extremes. For 'tis the disproportion'd Mixture of the Juices in the first ways, that destroys the natural Fermentation of the Blood, and is the Source of all Chronical Distempers, commonly, but falsely, imputed to Obstructions. And all Remedies, capable of reducing them from either Extreme, are what I call *Alteratives* in general; but are distinguish'd by several particular Names corresponding to their Special Qualities, as those of an Oyly Mucilaginous Body, and free from any Predominant Salt, are call'd *Softening*, *Suppurating*, *Expectorating*, *Incrassating*, *Anodyne*, &c. Opposite to them are the *Astringents*, of a Styptick, Austere Body, Compounded of Earth and an Acid Salt, which thicken fluid humours, and contract the Fibres of the Parts, as Allum, *&c.* Those that are most famous for making head against Acids, are sometimes term'd *Febrifuga's*, by reason of their noted Vertue in Intermitting Feavers; and sometimes *Vulnerary*, by reason of their healing Vertue. Such as have a sharp penetrating Salt, whether *Acid* or *Alcali*, are *Attenuating*, *Discussing*, &c. Those endow'd with a Volatil Oyly Salt, a piercing smell, and a grateful taste, are *Aromatic*, *Carminative*, *Cephalic*, &c. and are commonly us'd for Cordials. Those of a Volatil Salt, apt to dissolve the Mass of the Blood, are *Diuretic*, *Sudorific* and *Alexipharmacal*.

These are the general Classes of all remedies us'd in Physic. Such of 'em as are more Universal, and answer more Indications are to be most esteem'd. As Opium, *Sal Volatile Oleosum*, and the fix'd Sulphurs of Minerals and Mettals; which are all useful in an infinity of Cases; and are upon that account Entitled to a preference, before others of a narrower extent.

SECT. II.

Of the Vital Functions of the Body.

HAving touch'd upon the Vertues of Medicines and their manner of Operation, the next thing is to consider the Subject or Body upon which the Operation is perform'd. Its structure presents us with some gross material parts, and some more subtile and active, which serve to inform and actuate the other. The former represent the External Fabric of an Ingenious Machine; the latter, the Internal Wheels and Springs of Motion.

The Ancients imagin'd our grosser part to be compounded of the four first Elements, but without either Reason or Experience. I deny not but that there are such things as Water, Earth and Air, which make up the greatest part of our Terraqueous Globe; but I doubt much, if they and fire are the first and simplest Ingredients of all Compounds.

Indeed as to Water, I do not dispute the point. *Thales* and *Helmont* have clearly made it out, that all things consist of Water. But as for fire, the Modern Experiments do sufficiently prove, that 'tis nothing else but a division of the smaller Particles of fat Acids; such as we call Sulphurous, by means of the Air; from whence heat and light must necessarily ensue. We see that flame is only a further rarefaction of the same Particles, that when more condensated, appear in smoak; and a little more Condensation converts smoak into soot; and the Oyl of Soot, which is a fat Acid, differs from all the three, as they from one another, by a further or lesser degree of Rarefaction or Condensation. Thus the various Conjunction, Separation, or Transposition of the same minute Particles, is the Original of the Generation and Corruption of different Bodies. Therefore our Modern Philosophers have thought fit to depart from the common Elementary Road, and search for the Elements of Bodies among these minute Particles, which by combining or separating from one another, in greater or lesser proportions, alter the Constitutions of Bo-

dies, and transform 'em into others of a different mould. *See the Honourable Mr.* Boyl *of the Original of Forms and Qualities.*

As I take it, these Particles that enter into the Composition of all Bodies, and are the most immediate Elements into which they resolve, may be justly divided into four Classes. 1. The Saline Particles which are either Acids, Alcali's, or Nitrous. 2. the Fat Oyly Parts. 3. The Watery, and 4. The Earthy. These I say, are the most immediate Principles of dissolv'd Bodies. I do not advance them for the first and simplest, nor for the last; for even these may be resolv'd into others, and most of 'em into Water. Perhaps the Watery Particles have a better Title to that Character. The various twisting of 'em together, according to the respective seminal Vertue may give rise to most, if not all, Compounds; which dissolve into Water again when the seminal Powers ceases to operate.

Our Body is immediatly fram'd of these four sorts of Particles, especially of Salt and Sulphur; which are the chief Ingredients of the Blood, Chyle and other Juices. The seminal Power determines 'em to such a particular concretion as appears in our Organs; and the respective Texture and Proportion establish'd among 'em, is the Gauge and Measure of our Temperaments.

The Changes that happen to Bodies, are chiefly occasion'd by the Activity and Various Engagements of the saltish Particles. *Fermentation* and *Effervescency*, which are the most remarkable motions in our Bodies, are totally owing to them. The former is an intestine motion of the minute Particles, occasion'd by the mutual Jarrs of Acid and Alcali salts, which disturbs all the other parts, and terminates either in the final dissolution of the Body, or such an alteration, as a New Union and Temperature of the Salts may allow of. *Effervescency* or Boyling is a much stronger motion, occasion'd by the greater Purity, and Sharpness of the Salts.

The more subtile penetrating parts of our Body are the Principle of Life and Action. When they cease to perform their wonted motions death takes place. Their regular and undisturbed motions are the measure of Health; and the least disorder among 'em is justly call'd a Disease.

They are nothing else but the Subtiler and more Volatile Parts of the Blood separated in the Brain; which by Reason of their Activity are called Spirits, tho' in effect mate-

material, divisible and liable to Corruption. When they are mix'd with the Blood, and serve to enliven and exalt its Mass, accompanying it through all the Parts of the Body, they are call'd *Vital* Spirits, and are imploy'd in *Vital* Functions; but when they are lodg'd in a different Apartment, and Confine themselves to the Nerves and Brain, they are engag'd in the *Animal* Faculty. In this Office they resemble the Bodies of Light, and are therefore call'd *Lucid*; but in the other they, *fire-like*, exalt and elevate the Blood. *Vid. Willis. de Anim. Brutor.*

There is nothing more conducive to a regular Practice of Physic, than a right understanding of these two Faculties; and the several disorders they are obnoxious to. The *Animal* faculty depends upon the regular motion of the Spirits and a sound Constitution of the Brain and Nerves. This I design to treat of *Anon.* The *Vital* faculty consists in the regular motion of the Blood, Chyle, and the other Juices. The external motion of the Blood is its Circulation, but its Intestine motion is what we call a Fermentation. Both these must be preserv'd in their due tenor.

The Encumbrances of Circulation are remov'd or prevented by Sudorifics, which attenuate and dissolve the Blood; and put it into a swifter, but equal motion. But the more present relief is from Blood letting; which lessens the quantity of the Blood, and makes way for a freer Circulation, by emptying the Vessels; or to speak with the Ancients *Evacuates* and *Ventilates* the Blood. 'Tis indifferent what Vein be open'd, when we only design to evacuate or lessen the quantity; for that will certainly follow, open what Vein you will. So in a general *Plethora*, all choice of Veins is ridiculous. But if there be any particular Inflamation, that seizes only one particular Member, then indeed Cases are alter'd. Not that I establish, even then, any necessity of distinguishing Veins in one and the same Member. As, if there be an Indication for letting Blood in the Arm, I think tis much at one, whether the *Cephalick*, *Median*, or *Basilic* Vein be opened. But 'tis chiefly in regard of the Superior and Inferior Regions of the Body, that a difference must be observ'd. The Heart is the Centre of the Body, and divides the Upper Region from the Lower: Now if there happen any Inflammation in the Upper Parts, opening a Vein in the Lower Region, as in the Foot, diverts the Blood; for the descending branch of the *Aorta*, being thereby in some measure empty'd, the blood will more plentifully

tifully flow into it, than into the aſcending branch, where the Stoppage, or Inflammation blocks up its way. This is call'd an Univerſal Revulſion. A particular *Revulſion*, or *Averſion*, is when a Vein is opened in the ſame Region and Neighbourhood with the part affected; as if in a Quinſey they let blood in the Arm. If the very next Vein, or the Vein through which the ſtanding blood muſt naturally return to the Heart, be opened, 'tis call'd a *Derivation*. As in a Quinſey, we firſt make a *General Revulſion* by bleeding in the Foot, to divert the Univerſal Maſs of the blood from feeding the Inflammation. Then for a more particular Revulſion, we bleed in the Arm, in order to draw off the ſtagnating blood, through a Neighbouring Channel. If this do not take off the Inflammation quite, we breath a Vein under the Tongue, in order to diſengage and evacuate the ſtanding blood, that ought naturally to paſs that way. In this Senſe all theſe celebrated Effects of blood-letting, are very conſiſtent with the Rules of Circulation; which, in the Senſe of the Ancients, were altogether unexplicable. But the Univerſal Revulſion muſt always lead the Van, for fear a particular one ſhould encreaſe the Inflammation, by inviting the blood to the Adjacent Parts.

I'll only ſtay to preſent you with a Remarkable Inſtance of the bad Conſequence an ill tim'd *Averſion* or *Derivation*, may produce. I borrow it from *Lindanus*, in his Practical Comment upon *Hartman*. A Surgeon of *Amſterdam* was ſeiz'd with an Inflammation in his Right Eye. He ſent for ſome Old Phyſician, that order'd him to be bled in the Right Arm: Accordingly he was bled, which ſenſibly Augmented the Inflammation. The next day the Oracle was conſulted again. He, to mend the matter, order'd him to be bled in the Left Arm; the Conſequence of which was, that his left Eye was inflam'd, though formerly untouch'd. The Third Day, the Old Gentleman perſiſting ſtiffly in his wonted Courſe, order'd bleeding in the Right Arm again; the performance of which made him quite blind in the Right Eye. And afterwards, to make all odds even, he was bled again in the Left Arm, which heighten'd the Inflammation of the Left Eye to the laſt degree. In this extremity he ſent for a more skillful Practitioner, who only let him blood in the Foot, and immediatly the Inflammation began to aſſwage. The cauſe of ſuch Accidents is very plain. For the quantity of the blood not being diminiſh'd before, and a Door being open'd to it in the Arm, it will natu-

naturally croud upwards, where meeting with Obstructions in the Passages, it cannot but accumulate and augment the Inflammation. An Universal Revulsion in the opposite Region of the Body ought to have usher'd it in; which would have prevented all the inconveniencies that happen'd. So much for the *Circular* motion of the Blood, and the means of preserving or retrieving it.

The fermentation of the Blood is occasion'd by the Activity of the Acid and Alcali salts, which entertain a perpetual Intercourse with the Sulphurous, Watry and Earthy Particles. The different Proportions establish'd among 'em, by the radical power of the Seed, do vary this motion, which is peculiarly calculated for every individual temperament. This Idiosincrasy, or Seminal property, is the Standard and Rule of the natural Fermentation. When it swerves from that, it is called, a *Cacochymy*, or Corruption of the Juices; which is nothing else but the disproportion and degeneracy of these Saline Particles, and the irregular motions that ensue thereupon. If the prevalency of an Acid Salt have occasion'd it, 'tis call'd an Acid depravation of the Juices; if an Alcali or Urinous Salt, it goes by that name. These are the only possible causes of a *Cacochymy*. If either of these predominant Salts be lodg'd in a Watry or Serous Humor, it gives rise to a *Catarrh*, or serous Corruption. If the humour be Phlegmatic and viscid, 'tis call'd *Pituitous* or *Chylous*. The Melancholly *Cacochymy* of the Ancients is only a Predominant Acid, which must either be *Serous* or *Pituitous*, according to the humour in which 'tis seated. The *Bilious* is a Volatil Oyly Salt degenerated from its Natural Symmetry. So all the different kinds may be reduc'd to these two Branches, of *Acid* and *Alcali*.

An *Acid* Depravation of the Juices, is occasion'd by the Prevalency or Indisposition of the Acid Salts. If they are too plentiful, they thicken the blood, and retard its Circulation. If they are otherwise corrupted, as too Rancid, Austere, or viciously Salt, *&c.* They create several irregular effervescencies in the blood, such as we frequently meet with in Scorbutic and Hysteric Constitutions. These Corruptions of Acid Salts, may be owing to the Cold Air (which seems to be impregnated with a hidden Acid) Acid Food or Liquors, Grief, Care, Sorrow, Neglect of Exercise, and such like Errors in the use of the *six not Natural things*; which either augment their quantity, or whet and sharpen

ſharpen 'em beyond their Natural State. The *Urinous* or *Alcalin* Depravation, is occaſioned by the diſproportion or corruption of the Volatil Urinous Salts, which, when mix'd with Sulphur, Compoſe the Bile. If they're too Copious in the Body, if too ſharp and pointed, if too Oyly or Fat, or otherwiſe degenerated from their Seminal Properties, they create infinite diſorders in the maſs of blood. Their Corruption may be owing to Aromatic, Sharp, or Penetrating Food, immoderate Watchings, Exerciſes, Anger, and ſuch like Paſſions, which contribute to their unnatural Encreaſe or Depravation.

The general cauſes of all *Cacochymical* diſpoſitions may be divided into three Claſſes.

Firſt, The formal efficient cauſe of all diſeaſes is the Spirits; which, are equally the cauſe of all natural and unnatural motions.

Secondly, The occaſional and material cauſe enclining and diſpoſing the Spirits to perform ſuch perverſe Actions; which according to *Hippocrates*, is the Diſproportion and Intemperate quality of the minute Particles, that refuſe to Aſſimilate, or Incorporate with the Spirits, and ſo provoke 'em to irregular motions.

Thirdly, The remote and mediate cauſe, is the Errors and Imperfections of Digeſtion, eſpecially of the firſt perform'd in the Stomac; which is the Foundation of all other Digeſtions, and, if deficient, perverts all the Juices in the Body.

The method of curing all *Cacochymies*, or, which is the ſame thing, all irregular fermentations in the blood, is firſt to retrieve the Natural qualities of the Juices and their minute Particles, by *Altering Medicines*, and then to *Evacuate* the Corrupt Juices to prevent any further Infection. The general *Alteratives* are ſuch as Correct a peccant Acid or Alcali, and reduce the Particles to their due Symmetry and Proportion. Beſides, there are ſome ſpecific *Alteratives* which are peculiarly calculated for the reſpective Circumſtances of the Corrupt Acid or Alcali. For one Acid may differ vaſtly from another, according to the infinite ways of Corruption 'tis liable to, and conſequently may produce very different, if not contrary, effects. 'Tis true, we cannot have, *à priori*, any Circumſtantiate account of their diſtinguiſhing Characters: But the effects they produce, and the influence of medicines atteſted by Experience, may lead us to know ſomewhat of their

diffe-

difference; and accordingly to distinguish the specifics that we find successful in vanquishing one sort of Acids or Alcalis, but are not capable of gaining the like victory over others of the same general Class. This may be set in a clearer light, by the following Example. 'Tis an unquestionable truth, that Pleurisies, Stranguries, Ulcers in the Kidneys, Heart-Burn, Loosnesses, Gout, Gravel, *&c.* may all be owing to Vicious Acids. The general *Alteratives* that are oppos'd to Acids are convenient in them all, and are fit to usher in the specific Cure; which they cannot of themselves Compass. For 'tis not one and the same sort of Acid, that is the Predominant in all these Instances. In one, 'tis an *Acid* that congeals the blood, and occasions Pleuritick Pains; in another it is an *Acid* that sharpens the Urine and occasions a Stangury. Accordingly we find that tho' all fix'd *Alcali*'s are not inconvenient in Pleurisies, yet the Powder of *Boars* Teeth, and *Pike* Teeth, are specific Antidotes against that particular *Acid* that then prevails; as *Crabs* Eyes are in a Strangury. The like might be said of all the rest.

This consideration *Hippocrates* had in his view, in his Incomparable Treatise *de Veteri Medicina*, where he passionately expels the general Elementary Qualities, both from the Theory and Practice of Physic; and recommends to all Practioners, as in a manner the whole of their business, to enquire nicely into the Subdivisions and Specific differences of the general things; especially to the difference of tastes, whether Bitter, Sweet, Salt, Insipid, and a thousand such marks of distinction, which are to direct us in the choice of such Specific Remedies, as are peculiarly levell'd against the particular qualities of the morbific matter. These you may expect in the separate and particular description of every disease, and the method of its Cure.

SECT.

SECT. III.

Of Acid, Alcalin, Pituitous, and Serous Cacochymies, *or corruptions of the Juices in the Body.*

IF the Indiſpoſition be owing to a prevailing Acid, it ought to be Corrected by *Alcali*'s. Theſe may be divided into the *Vegitable*, *Animal*, and *Mineral* Claſſes.

The *Vegetable* furniſhes us with the *Urinous* and *Alby Salts* of *Wormwood*, *Centaury*, &c. Which deſtroy the *Acid*, and transform it into another concrete. with *Spices*, *Aromatic* herbs, ſuch as *Mint*, *Fennel*, &c. And Oyly Sulphurous medicines, that take off the edge of the Acid Parts. Some of theſe are prepared by *Diſtillation*, and ſome by *Expreſſion*; but the former are more effectual, ſuch as Spirit of *Wine*, the Spirits of *Water-Creſſes*, *Scurvy-Graſs*, &c. and the Diſtill'd Oyls of *Mace*, *Cloves*, &c. *Camphyr* and its Productions belong to this Family.

In the Animal Claſs we have the Spirits and Volatil Salts extracted from the parts of Animals. Such are the Spirits of *Hartſhorn*, *Urine*, *Sal armoniac*, &c. which are of great uſe in all Acid Conſtitutions. The hard and friable Parts of Animals are likewiſe very proper; as *Crabs Eyes*, burnt *Hartſhorn*, &c.

The Mineral Province affords us very Powerful Medicines, not Inferior to thoſe of the other two. Such are *Diaphoretic Antimony*, and the fix'd Sulphurs of other Minerals: Earths, Stones and Mettals, as Chalk, ſeal'd Earth, and ſeveral Metallic Productions. Whatever partakes of Gold or Silver, is of noted excellency in ſubduing the inveterate Acids, that proceed from Wine, and are peculiar to Gouty Conſtitutions. Lead and its Salt, call'd *Saccharum Saturni*, have that property of aſſuming a ſweet taſte, when they meet with Acids, and are thereupon Intitled to the Character of *Alcali*'s. But above all, Steel may juſtly claim a preference. And all remedies that have

ave it for their Basis, are certainly the most Sovereign Conquerors of Acids.

These are the remedies we use for Correcting Acids in general, which may be prescrib'd after this or the like manner.

Take of prepar'd *Crabs Eyes*, Red Coral prapar'd, burnt *Hartshorn*, of each a scruple; Salt of *Tartar* and *Wormwood*, of each fifteen Grains; distill'd Oyls of *Cloves* and *Cumin*, of each twelve drops; and four or five Grains of *Laudanum Opiatum* prepar'd by fermentation. Mix all together; It will make a Powder for six or seven Doses. Or,

Take of prepar'd *Crabs Eyes* a Dram, *Cuttle-bone* half a Dram; red *Coral* prepar'd, and Chalk, of each a scruple; Salt of *Wormwood* two scruples, *Nutmegs* half a Dram. Make a Powder to be us'd as before.

If a Potion be more acceptable,

Take of *Carduus Benedictus* and *Fennel Water*, of each an Ounce and a half. Spirit of *Sal armoniac* a Dram and a half; *Crabs Eyes* and Red *Coral*, prepar'd, of each fifteen Grains, Salt of *Fumitory* twelve Grains, distill'd Oyl of Cloves Six drops, Syrup of Mint one ounce. Mix them for a draught.

These are the common forms of Recipt's against Acids in general, but Steel is a peculiar Specific for subduing an Acid in the first Passages.

Sometimes we meet with an *Austere Hypochondriac*, or *Hysteric* Acid; which requires Volatile remedies. They may be prescrib'd in this or the like form.

Take *Marjoram Water*, *Mint* or *Rosemary Water*, of each an ounce and a half, or two ounces. *Aqua Vitæ Matthioli*, from three to six Drams. Essence of *Castor* a Dram and a half. Spirit of *Sal armoniac*, or instead of it Spirit of *Hartshorn* with Amber, from half a Dram to a Dram, Syrup of Fumitory from half an Ounce to six Drams. Mix all together and give a spoonful often.

Sometimes we add fifteen or twenty four Grains of Red *Coral* and *Crabs Eyes*, or three or six drops of the distill'd Oyl of *Cloves*.

An *Alcalin* Depravation must be cur'd by *Acids*. The vegetable *Acids* are *Vinegar*, Juice of *Citrons*, *Berberis*, *Quinces*, &c. The *Acid* Spirits are commonly extracted from *Minerals*, as the Spirits of *Salt*, *Vitriol* and *Nitre*, which last, if dulcify'd with Spirit of Wine, is of excellent use in a redundancy of *Choler*. It allays the *Saline* sharpness,

neſs, and fixes that Volatil mobility which occaſions preternatural Commotions. Mineral and Metalline Sulphurs mix'd with *Nitre*, are very proper on the ſame occaſion. Such are *Antimony Diaphoretic*, and *Bezoar* Mineral, which qualifie the ſharp, and curb the inflammable Particles; They are likewiſe Pacific, and Evacuate the Particles thus fix'd and corrected, by the pores of the skin.

Neither are the compoſing Medicines, that partake of *Opium*, to be neglected in this caſe. 'Tis true, their cure is but Palliative; but the ſervice they do in compoſing the Spirits, and quelling all irregular motions, do's ſufficiently juſtifie their uſe.

All *Acid* remedies augment the quantity of *Acids* in the Body. The Aromatic and Spirituous Liquors, the Volatil Salts as well ſharp as Oyly, and the bitter Ingredients which we generally exhibit in Intermitting Feavers, are all effectual reſtorers of the Volatil Oyly Salt in the blood, and conſequently of the Choler which it produces.

If a ſharp *Volatil* and *Choleric Salt* Reign in the Body, it commonly produces *Thirſt*, *Choleric Looſeneſſes*, and ſuch like Symptoms that attend burning Feavers. The following preſcriptions are uſual in that caſe.

Take of *Tartar* Vitriolated one Dram, the *Salt* call'd *Arcanum Duplicatum* half a Dram, or two Scruples, *Bezoar Mineral* one Scruple. Make a Powder for three Doſes. Or,

Take of *Nitre* prepar'd with *Antimony*, or *Arcanum Duplicatum*, half a Dram, *Bezoar Mineral* a Scruple. Mix them for two Doſes. Or,

Take Powder of *Liverwort* two Scruples, *Crabs Eyes* prepar'd one Scruple. Make a Powder, to be divided into three Parts.

Theſe Preſcriptions are very uſeful, before Evacuation, where an Oyly Volatil Salt prevails; as well as the enſuing Julep.

Take *Sorrel* and *Rasberry Water* of each an Ounce and a half, freſh Juice of *Citrons* or *Quinces* one Ounce. *Diaphoretic Antimony* from a Scruple to a Dram. *Bezoar Mineral* from half a Scruple to a whole one. Syrup of *Rasberries*, ſix Drams or an Ounce. With a convenient quantity of the Spirit of *Nitre* dulcified, make a *Julep*. Doſe two ſpoonfuls.

Thus I have hinted at the general Cures of *Alcaline* and *Acid* Corruptions. Besides these already mention'd, there are some Universal Remedies not confin'd to either side, but useful in both Cases. These are Emulsions extracted from the Milky Seeds, the distill'd Oyls of Vegetables, *Gums*, *Mucilages*, and the Sulphurous Productions of Minerals; which are all of a temperate Nature, and equally remov'd from either extreme.

A Pituitous *Cacochymy* must be cur'd by Altering, Attenuating and resolving Remedies, namely *Alcali Salts*, as well fix'd as Volatil, the more penetrating Gums, and generous *Aromatics*. The Morbific matter being viscid and tough, must be prepar'd and digested before we attempt any Evacuation. The common forms for Digestives are as follows.

Take of *Tartar* Vitriolated, and the Salt call'd *Digestivum Hypochondriacum*, of each fifteen Grains; Salt of *Wormwood*, and of *Carduus Benedictus*, of each half a Scruple. Mix for a Powder to be divided into two parts. Or,

Take of *Tartar* Vitriolated one Dram, Salt of *Carduus Benedictus* half a Dram, flowers of *Sal armoniac* fifteen Grains. Mix them together, and divide the Powder into three Doses.

These Powders must be exhibited a day or two before Evacuation.

The following Powder is to be taken twice a day, in the Morning before Dinner, and in the afternoon two or three hours before Supper.

Take of *Sal Armoniac* depurated a Dram and a half, *Mastic* half a Dram, *Cinnamon* a Scruple, Salt of *Wormwood* six Grains. Mix them, and use as before directed.

If Liquid forms are more acceptable, they may be prescrib'd thus,

Take of *Mint Water* an Ounce, the Salt call'd *Arcanum Duplicatum* a Scruple, *Crabs Eyes* prepar'd half a Scruple, Salt of *Tartar* five Grains. Syrup of *Hyssop* half an Ounce. Mix them for a draught. Or thus,

Take of *Mint Water* two Ounces, *Cinnamon Water* six Drams, *Gum Ammoniac* dissolv'd in *Vinegar* a Dram, *Tartar* Vitriolated a Scruple, Syrup of Roses an Ounce. Mix them for two or three Doses.

A serous *Cacochymy* is remov'd by the use of such remedies as alter the vicious *serum*, and evacuate it. These last mention'd are the subject of the ensuing Paragraph.

SECT.

SECT. IV.

Of the Medicines that evacuate the Corrupt Juices of the Body.

AFter the use of altering Medicines, 'tis a proper season to exhibit those that evacuate the prepar'd humors. They are distributed into five Classes. The first contains those which operate by Vomiting. The Second, those which move the Belly, and perform their office by stool. Those of the Third pass by Urine. The Fourth by the Pores of the Skin. And Lastly, the Fifth is allotted to the Medicines which evacuate by Salivation. This last Class is taken notice of elsewhere; but the other four I shall briefly run over.

CHAP. I.

Of Vomiting Medicines.

THE Animal Family affords no Vomits that I know of, except the Pairings of the Nails of Human Bodies: Which we infuse in generous Wine over night, and in the Morning give the strain'd Liquor to drink. 'Tis an excellent Vomit.

Among the Vegetables, *Asarabecca* is the safest and most successful Vomit. *Dioscorides* and the Ancients were not Ignorant of its efficacy. It enjoys a sharp pungent salt resembling that of Ginger and Zedoary; which provokes Urine, Corrects the causes of Chronical Distempers, and irritates the fibres of the Stomach. I have known Inveterate *Tertian* and *Quartan* Feavers cur'd by the use of *Asarabecca* with white Pepper, that would not yield to any other Medicines.

It may be given by way of *Powder*, *Infusion* or *Decoction*. If it be exhibited in form of a *Powder*, it ought to be pounded very fine; for the grosser Particles cannot enter into the pleats of the Stomach; and being eluded there, procure to themselves a passage by Stool. Its Dose is from half a Dram to a whole Dram.

For

For a gentle *Infusion* we take nine or ten Green Leaves of *Asarabeccæ*, and chop 'em small, and infuse them for the space of a Night in four Ounces of *Carduus Benedictus* Water, and half an Ounce of Mead. In the morning let the strain'd Liquor be exhibited. 'Tis a gentle Vomit.

For a stronger Infusion, take nine Green Leaves of *Asarabeccæ*, beat them in a Marble or Stone-Mortar, pouring simple Mead upon 'em, till you have reduc'd them to a Juice. Then take this juice, and dilute it with two Ounces of *Carduus Benedictus* Water. 'Tis an Admirable Vomit.

As for *Decoction*; *Helmont*, *Zwelfer*, and the Honourable Mr. *Boyle*, have observ'd, that if you boyl *Asarabeccæ* Roots in Water, they lose their Vomiting quality, and become Diuretic; whereas if you boyl them in Wine, 'tis an excellent Emetic. The Reason of which I take to be this, *Viz.* That their diuretic vertue proceeds from an essential salt not very Volatil; the saline Volatil Emetic parts being evaporated in boyling with Water; but Wine penetrates into the Texture of its body, before these Volatil salts are gone, and so partakes of their Vertue.

If you boyl *Asarabeccæ* Roots in Mead, you have a Noble Pectoral Medicine. It Attenuates the slimy humours in the Breast, and has no Emetic force.

There are no other Vegetable Vomits, fit to be us'd. White *Hellebor*, 'tis true, was frequently exhibited by the Ancients. But they infus'd it in a sweet Wine which qualify'd its sharpness; besides, the difference of Climate alters the Vertues of Medicines. I have seen very Tragical effects produc'd by white Hellebor, and therefore would not advise any to use it, except in one case, namely, Madness. 'Tis a specific for that disease, and is frequently attended with success, where Antimonial Vomits have prov'd ineffectual. Let it be us'd thus,

Take of the Roots of white Hellebor one Dram, infuse it in Rhenish Wine, or rather macerate it in some hot place for the space of one Night. Then boyl it; strain off this Wine, and throw it away, for 'tis too sharp. And pour fresh Wine upon it, only to stand in infusion all Night. In the Morning exhibit a Dram and a half, or two Drams of the strain'd Infusion to the Mad Person. 'Tis a Medicine admirably fit for this case, and this only.

In the Mineral Family, Antimony and Vitriol are the two noted Emetics. But Vitriol is not so friendly to Nature as the former; it weakens the Body, and disorders the Stomach, whereas Antimony produces no such effects. The *Vitrum Antimonii* alone is of more use and efficacy than a Thousand others. In this preparation, the Antimony is strip'd of its external Acid Sulphur; and contains only some Vitriolic Particles, which cause an Evacuation by provoking the fibres of the Stomach to a Contraction, and an Internal fix'd Sulphur which composes the irregular motions of the Spirits, and Corroborates Nature. Upon this account it may justly claim the Privilege of being prefer'd to all other Preparations, which rather cause than remove disorders.

It must be exhibited in infusion with Rhenish Wine, or in the form a Syrup. In substance 'tis both fallacious and hurtful. In adjusting the Doses of the infusion, we must have a particular regard to the quantity of the Wine, and not to the Powder infus'd. For twenty Grains infus'd in three Ounces of Wine, are no stronger than the infusion of five Grains in the like quantity. Rhenish Wine is the best for infusing it in, by reason of its Acidity, and the easie Admission it vouchsafes to the Antimonial Particles.

The same remarks are to be observ'd in the use of *Crocus Metallorum*, and *Mercurius Vitæ*.

Prescribe after this manner,

Take of *Vitrum* of Antimony, or *Crocus Metallorum*, or *Mercurius Vitæ*, four, five, six, or eight Grains: infuse them in a sufficient quantity of Rhenish Wine. Let them stand in a warm place all Night. In the the Morning stran the Wine through Paper, and exhibit one Ounce, or ot most an Ounce and a half, for a draught. If you please, you may add two Drams of Cinnamon Water. 'Tis a pretty enough Contrivance that some have of an Antimonial Cup, into which they pour the Wine, and let it stand in some warm place for the space of a day. Then strain it off, and exhibit as above.

If a Syrup be more agreeable.

Take of *Crocus Metallorum* two Drams and two Scruples. Infuse it for three days in ten Drams of Wine Vinegar. Let it stand in some hot place, and shake the Vessel fre-

frequently. Then strain it off and add ten Drams of Loaf Sugar. Stop the Glass well, and clap it into hot Water, and the Sugar will dissolve. Some add a Dram of the Essence of Red Poppy Flowers. Or,

Take four or five Drams of *Vitrum Antimonii*, infuse it in pure Wine Vinegar. Let them stand in digestion for some days, and shake the Vessel now and then. After some time strain it, and add an equal quantity of Loaf Sugar. Make a Syrup. Dose three or four Drams; and to those that are very robust six Drams. Or thus,

Take Glass of Antimony in Powder, half an Ounce, or an Ounce. Infuse in it half a Pound, or a Pound of Juice of Citrons, that has stood till it grew in some measure clear: Set them in a warm place for digestion, and shake the Glass frequently. Strain the Liquor, and with a sufficient quantity of Sugar boyl it into a Syrup; which may be prescrib'd thus.

Take of Mint Water six Drams, or an Ounce; Cinnamon Water two Drams; this *Emetic Syrup* half an Ounce; Syrup of Tobacco two Drams. Mix for a draught. The Dose of the Emetic Syrup must be vary'd according to its Preparation.

Some exhibit these Antimonial Emetics in the form of a Conserve or Bolus. As;

Take of *Vitrum Antomnii* in Powder an Ounce; infuse it in a Pint of New Wine or Juice of Quinces. Let 'em stand for digestion for some days, then strain it nicely through a Linnen-Cloth or Paper; and set the strained Liquor over a gentle fire, to evaporate to the consistence of Honey, or a soft Conserve. You may give about the bigness of a Pease or two.

These are the safest and most usual Vomits; next to them is Emetic Tartar, which is an Antimonial Preparation, but may safely be given in Powder. 'Tis true, the general Maxim is, that all Antimonial Vomits ought to be given in infusion; but solid Emetic Tartar is in a manner the same with the infusion of Antimony in Wine. For Tartar being the Natural Production of Wine, is impregnated with the same Acid, that equally rejects the Grosser and Noxious Parts of the Antimony, as well in a solid as a liquid form.

The best Preparation of Emetic Tartar is made from *Vitrum Antimonii*, thus,

Take Glaſs of Antimony two Ounces, beat it up together with an equal quantity of Cream of Tartar, boyl them in a ſufficient quantity of Common Water, and ſtrain the liquor while 'tis hot; then expoſe it to the cold Air, and 'twill run into Cryſtals. Thus you have Emetic Tartar both in a liquid and ſolid form. The common Doſe is two or three Grains, or five to robuſter Perſons. In Madneſs and Melancholly diſtempers we are oblig'd to augment the Doſe. The common form of Preſcription is, as follows.

Take of Emetic Tartar two, three, four or five Grains, Sugar refin'd ſix or ten Grains. Mix and make a Powder. To which add two drops of diſtill'd Oyl of Mint; Or, if you deſire it ſhould move the Belly, two or three Grains of Scammony prepar'd with Sulphur. Take this in a ſpoonful or two of Chicken Broth. The Sugar is added to give the Medicine a Body, leſt ſo ſmall a quantity as two or three Grains ſhould be loſt, or eſcape the view of the Patient.

If a Bolus be more Acceptable.

Take Conſerve of Mint one Dram, Emetic Tartar two Grains, with a ſmall quantity of Syrup of Cinnamon, make a Bolus. Or, take *Rob* of Juniper half a Dram, Emetic Tartar two Grains, Scammony prepar'd with Sulphur one Grain. With a ſufficient quantity of the Syrup of Orange Peel, make a Bolus. The Sulphur of Antimony call'd *Auratum*, is likewiſe an Excellent Vomit, if it be well prepar'd; as thus.

Take of Antimony, Tartar and Nitre, of each equal quantities. Melt the Antimony in a Crucible, then throw the Tartar and Nitre into it. Let the Sulphureous and Mercurial parts be ſeparated by *Deronation*; and afterwards ſeparate the Regulus or the refined part from the Droſs. Diſſolve the Droſs in Common Water, and precipitate the Sulphur with a ſolution of Tartar. The Precipitation is beſt perform'd by Tartar, by reaſon that it Mitigates the Acidity. The Doſe of this Sulphur is from five to ſix Grains. As.

Take Cream of Tartar half a Scruple. Sulphur of Antimony right prepar'd ſix Grains, prepar'd Scammony two Grains, mix and make a Powder.

These are the safest and mildest Vomits, which may suffice for a thousand Cases. But sometimes when we meet with obstinate and inveterate distempers, we have recourse to Mercurial Emetics.

Pure Mercury is a Metallin Alcali, which is easily fix'd by the addition of Acids, and set at liberty by Alcali's. But all Acids are not equally capable to fix it. The Spirits of Nitre and Vitriol render it very fix'd, whereas Spirit of Salt leaves it more Volatil. Thus Mercury prepar'd with the former is not so readily sublimated, as when joyn'd with the latter. If you dissolve Quicksilver in Spirit of Nitre, the Acid of the Spirit fixes the Mercurial Alcali, so that it remains at the bottom when you draw off the Spirit. But if you throw common Salt into it, the Mercury precipitates, which by separation and sublimation yields a Powerful Corrosive. But after all, 'tis certain that liquid Mercury cannot be Coagulated, but by Acids: For Alcali's and Urinous salts restore it to its natural freedom. Cinnabar is a mixture of Mercury with an Acid Sulphur that fixes it; now if you add salt of Tartar, Urine, or the like, it disengages the Mercury, and brings it to life again.

The Common Mercury of the Shops is not this Genuin Alcali that I've thus describ'd, but Adulterated with Sulphur. It being liquid, is apt to mix with an Acid, so that we never find it pure: And this Acid Sulphur is the hidden cause of Salivation; it attenuates and dissolves the viscid stubborn humors, and evacuates them by the Salivary Glandules; while the Mercurial Alcali absorbs the most fix'd Acids in the Body, that wou'd not yield to any other Medicine.

Crude Mercury is a mild enough Medicine, at least its sharpness is so insensible, that it seldom procures either Stool or Salivation at first. I once prescrib'd Crude Mercury to a Woman subject to the Iliac Passions, that had been constipated for a long time. I order'd her three Ounces to be drunk with her other liquors, and continu'd the use of it till she had four and twenty Ounces in her Body. It produc'd no sensible effect till the fourth Day that she began to spit; and the viscid humours that the Mercury had attenuated were Copiously voided by Stool. Thus Crude Mercury is inoffensive with regard to the solid parts. It does not irritate either the Stomach or Guts, to contract themselves and cast out what they contain; but only attenuates the viscid humours that block up the Passages, and prepares 'em for a spontaneous Evacuation.

To return to Mercurial Vomits; Mercury being of it ſelf uncapable to provoke the Stomach, muſt be mix'd with an Acid in order to become Emetic. The more it pertakes of the Acid, the more fiercely it operates. If the Acid Spirit in which 'tis diſſolv'd be drawn with a gentle fire, and but once; 'tis a dangerous Medicine and ſcarce fit to be us'd. But if the Acid be ſufficiently taken off either by a greater force of fire, or reiterated Deſtillations, it becomes milder. The mixture of the Acid and the Mercurial Alcali makes a Vitriol-like Concrete, which provokes Vomiting and moves the Belly; for all Cathartic Medicines taſte like Vitriol.

The beſt Emetic of all the Mercurial Family is *Turbith* Mineral. There are two ways of preparing it. The firſt was invented by *Crollius*, and 'tis this,

Take half a Pound of Mercury and Infuſe it in a Pound of Rectify'd Spirit of Sulphur. Draw off the Spirit with a ſtrong fire; and repeat the Diſtillation thrice. The fourth time add a little freſh Spirit, and continue to draw it off till the bottom of the Retort and the Sand become Red hot. Then take out the white Maſs, or *Caput Mortuum*, and infuſe it in Rain Water, or ſome Diſtill'd Water. Let it ſtand and digeſt till it ſweetens, that is, till all the ſharpneſs of the Water be gone. Thus the white precipate becomes yellow. Put this yellow precipate into a Glaſs with a long Neck, and let it ſtand for digeſtion over a fire of Aſhes for eight days, that ſo the reſidue of the Mercury (if any there be) that is not fix'd by the Acid, may be ſublimated in the head of the Glaſs. Then take the Powder that lies at the bottom, and kindle freſh Spirit of Wine thrice upon it.

Here the Spirit of Sulphur is prefer'd to that of Vitriol, which generally retains ſome of its Mineral Particles, and by Vertue of their motions, if it ſtand any conſiderable ſpace of time, grows muddy and hot. Spirit of Salt and Nitre are two extreams, from which that of Sulphur ſeems to be equally remov'd. Therefore *Crollius* prefer'd it to all other Acids. He choſe Diſtill'd Waters for ſweetening the Precipate, becauſe Common Water is already Loaden with Salt, and therefore unfit to charge it ſelf with Foreign Salts. This *Turbith* Mineral ought not to be given in Powder, leſt it offend the Gums and Palate; Bolus's and Pills are Convenient forms.

Take

Take of *Crollius's* Turbith Mineral five Grains, *Vinice* Treacle, as much as sufficeth to make a Bolus. Or,

Take the same quantity of Turbith Mineral, and with Juice of *Spanish* Liquorice reduce it to the consistence of Pills.

The other preparation of Turbith Mineral, was first Communicated to the World by *Mynsichtius*. 'Tis as follows,

Take Corrosive Sublimate Mercury and dissolve it in Common Water, then precipitate with the Oyl of Tartar *per deliquium*. Take this precipitate and sweeten it often with a distill'd Water, or hot Common Water, and kindle Spirit of Wine upon it several times.

The Dose is from five Grains to six. It is a very Powerful Medicine in all inverate Distempers arising from an Acid. It absorbs the Acid Particles, attenuates and evacuates the viscid humours.

Salt of Vitriol is a Nauseous Medicine, and hurtful to the Stomac. Its Emetic Vertue seems to proceed from the oar of Copper of which it partakes: For the Spirit of Sulphur, and Chalybeat Minerals which are its other Ingredients, are known to be no Vomits.

Vomiting ought to be avoided by those who are subject to a Rupture; by Child-bearing Women, and such as are troubled with a down-falling of the Womb.

CHAP. II.

Of Purging Medicines.

THE humours evacuated by stool are convey'd to the Guts, by the passage of the Choler, or that of the Pancreatic Juice, or through the miliar Glandules inserted into the Coats of the Guts. The Mesaraic Veins cannot cast forth any serum, by reason that all secretion must needs be perform'd by Glandules.

Our Purging Medicines are all prejudicial to the Stomac, except *Aloe* and *Rhubarb*. They are endow'd with a certain Virulency that offends our Constitutions; and do equally assault both the noxious and nourishing Juices. If they do not meet with Corrupt humors, they make a prey of the good ones. Accordingly we see that they weaken

the body, diſorder the ſpirits, and ſometimes produce very diſmal effects. Which obliges us to add Correcters to qualifie and cicurate their malignant Qualities.

The Animal Family produces no Purgatives. The Vegetable Boaſts of a great many, which are all endow'd with a ſharp volatil Salt mix'd with a viſcid Oyl. Fix'd Salts are the moſt proper Correcters of Vegetable Purgatives, by reaſon that they open the reſinous Textures, and remove the offending viſcidity. Sometimes Fermentation produces the ſame effect. The Mineral Purging Medicines conſiſt of a ſharp Vitriolic Sulphur, which is admirably Corrected by adding Nitre.

They all compaſs their end by twitching and vellicating the Coats of the Guts, or the Orifices of the Choleric and Pancreatic paſſages; or by ſqueezing the Miliar Glandules, and ſo provoking them to an Evacuation. Some Purging Medicines enter into the Blood, and diſſolve its Maſs. If there be any corrupt juices Incorporated with it, they carry them off. If there be none, they melt down the landable Blood into ſerum, and diſpoſe it for ſecretion.

We are oppreſs'd with a numberleſs train of Purging Medicines, whereas one or two might Anſwer all our demands. Some few indeed, beſides the evacuating vertue, have a ſpecifick relation to ſome Diſeaſes, as black Hellebor to Melancholy, Rhubarb to the diſorders of the Kidneys, and eſpecially *Coloquintida* to all Acid Enormities. But by a modeſt Computation, five or ſix might be pick'd out that might very well ſuffice for all the Indications in Phyſic. Theſe are, Jalap, Senna, black Hellebor, Aloe and Rhubarb, to which we may add Scammony and Coloquintida, for quickning Ingredients.

Jalap is a Root imported from *Mexico*. Its Purgative Vertue is owing to its reſinous Oyly parts which are ſtrongly fix'd by an Acid. For if you extract the Reſin out of it by ſpirit of Wine, the remaining *Caput Mortuum* is rob'd of its Purging Vertue. This diſcovers the error of many Phyſicians who order Jalap to be infus'd in Wine or Common Water, which are improper Vehicles for a reſinous Body. It purges gently without throws or gripings. The excrements it evacuates are tinctur'd with a yellow colour. It agrees beſt with moiſt Conſtitutions, and is recommended by *Borellus*, as a ſpecifick in a Dropſie.

If

If it be well Concocted in the first Passages, it not only evacuates but attenuates the humours. But the Resin of Jalap taken in solid Powder sticks to the pleats of the Stomach and Guts, and causes a great many disorders, and sometimes a super-purgation. Whereas if it be dissolv'd with the Yelk of an Egg in any convenient liquor, it is easily concocted, and operates without any trouble. If Jalap be desired in a solid form, we prescribe thus,

Take Cream of Tarter from fifteen Grains to a Scruple, Powder of Jalap ten, twelve, or fifteen Grains, and a drop or two of distilled Oyl of Annisseeds or Mace. Mix and make a Powder.

If it want to be quickened, thus,

Take Powder of Jalap ten, fifteen or sixteen Grains; Cream of Tartar, or Tartar Vitriolated, or the Salt called *Arcanum Duplicatum*, from twelve to fifteen Grains; Prepared Scammony one Grain or two; Distill'd Oyl of Anisseeds or Mace, or Cinnamon two drops. Mix and make a Powder as above. This is call'd the Purging Vegetable for many ules, or *Purgans Vegetabile Polychrestum.*

The following prescription purges gently, and does not Gripe.

Take Cream of Tartar one Scruple, Resin of Jalap half a Scruple, Salt of Tartar seven Grains, Distill'd Oyl of Anisseeds two drops.

If a Bolus be more acceptable than a Powder,

Take of Conserve of Clovegilliflowers half a Dram, Cream of Tartar fifteen Grains, Powder of Jalap half a Scruple. Distill'd Oyl of Mace two drops. With a sufficient quantity of Solutive Syrup of Roses, make a Bolus. Or,

Take of the Pulp of Raisins two Drams, Powder of Jalap a Scruple, Scammony prepared with Sulphur a Grain. With a sufficient quantity of the Syrup of Fumitory, make an Electuary.

For Pills prescribe thus,

Take of *Extractum Catholicum* twelve Grains. Resin of Jalap four Grains, the extract of *Trochisci Alhandal* two Grains. Mix for Pills.

For a liquid form, thus,

For

Take of ſpirit of Wine, or of any other rectified ſpirits, one Pint, of the Roots of Jalap four Ounces, Citron Peel ſix Drams; Saffron five Grains. Let them ſtand in a warm infuſion, then ſtrain the liquor, and reſerve it for uſe: 'Tis called *Eſſentia Citrata*, and may be given from half an Ounce to ſix Drams. Or,

Take of Hyſſop Water an Ounce, Cinnamon Water three Drams, Powder of Jalap fifteen Grains, Extract of *Trochiſci Alhandal* two Grains, Syrup of Cichory with Rhubarb half an Ounce. Mix for a Potion. Or,

Take Roſin of Jalap from half a Scruple to twelve Grains, Salt of Tartar from ſix to ſeven Grains, with a ſufficient quantity of the Syrup of Roſes, make a Syrup. The Salt of Tartar Corrects the Reſin, and prevents its ſticking to the pleats of the Stomach.

If an Emulſion be more agreeable,

Take Melonſeeds peel'd half a Dram, Reſin of Jalap ſix, ſeven, eight, nine, or fourteen Grains. Beat them up together, pouring in of warm Roſe Water or Mint Water, or any other convenient Water, an Ounce; add Cinnamon Water two Drams. Make an Emulſion, and ſweeten it with ſolutive Syrup of Roſes or any other grateful Syrup. You may add two Grains of Scammony prepar'd with Sulphur or one Grain of the extract of *Trochiſci Alhandal*, with eight Grains of Salt of Tartar.

Hartwigius prepared it with the Yelk of an Egg, thus,

Take reſin of Jalap ſeven, eight, or ten Grains (and for thoſe who are more robuſt, twelve or fifteen Grains) beat 'em up with the Yelk of an Egg. Then pour upon them of Fennel or Mint Water half an Ounce, or as much as ſufficeth to make an Emulſion. Afterwards add Cinnamon Water a Dram or two; with a ſmall quantity of ſugar or Syrup of Cinnamon. 'Tis an admirable Purge and ſometimes evacuates both upwards and downwards.

Senna was firſt found out by the *Arabians*. *Hippocrates*, and the Ancient *Grecians* knew nothing of it. It is a mild Purgative, more uſual in Chronical Diſtempers, than in acute, which are generally cur'd by Vomits. Three things are diligently to be obſerv'd in uſing of it. Firſt, that the leaves be well ſeparated from the ſtalks, which are apt to Gripe. Secondly, that they be not be infus'd too long, leſt the thicker mucilage which is troubleſome to the ſtomach and guts

guts be alſo extracted. For the Purging Vertue of *Senna* proceeds from a Volatil mucilage attended by a thicker. The former is gentle and eaſie. The latter griping to a high degree. Thirdly, that it be never exhibited without the addition of Ginger and Tartar, which ſharpen and attenuate the mucilage: It is a proper purge for hot and dry Conſtitutions.

We preſcribe it in Powder thus,

Take Cream of Tartar and Leaves of Pick'd *Senna*, of each two Drams; Ginger, Aniſſeeds, Cinnamom and Galandal, of each half a Scruple. Mix and make a Powder. Which is a gentle Lenitive, and may be taken at dinner in a ſpoonful of broth. Doſe as much as will lie upon the Point of a knife. The infuſion of *Senna* is better than the Decoction, in which the Volatil mucilage evaporates, and the thicker is too much extracted. If you add Cream of Tartar to it, it muſt always be boyled, elſe it will not mix with the Cream. Therefore in ſimple infuſions we only add ſalt of Tartar, and for the moſt part black Hellebor.

For Decoction.

Take of the leaves of Picked *Senna*, Fearn of the Oak, of each three Drams; Cream of Tarter one Dram. Boyl them in a cloſe Veſſel with a ſufficient quantity of Cinnamom Water. Strain out three Ounces of the Liquor, and add to it three Drams of Cinnamom Water, and half an Ounce of the Syrup of Borrage. Mix for a draught.

For Infuſion,

Take of the leaves of *Senna* two, three, or four Drams, Ginger or Anniſeeds a ſcruple, ſalt of Tartar from fifteen Grains to a Scruple. Infuſe them in a ſufficient quantity of Cinnamom Water, or Fumitory, or Cichory Water. Let them ſtand warm for a Night. In the morning give two or four Ounces of the ſtrain'd Liquor according to the Circumſtances of the Patient, adding two, three, or four Drams of ſolutive Syrup of Roſes, or Syrup of the Juice of Chermes Berries. The ſalt of Tarter will render the Potion red, but 'tis very grateful, and operates gently. However I prefer the following infuſion.

Take of the leaves of *Senna* a Dram and a half or two or four Drams (at moſt.) Black Hellebor Roots, from half a Dram to a Dram, (or Rhubarb from one Dram to two Drams) Anniſeeds, from a Scruple

Scruple to a Dram (or Ginger from a Scruple to half a Dram) Salt of Tartar fifteen, twenty or thirty Grains. Infuse them in a ſufficient quantity of Betony, Fumitory, Hyſſop or Cichory Water, for a Night. Add to two, three or four Ounces of the ſtrain'd Liquor, three or four Drams of Cinnamon Water, with half an Ounce of ſolutive Syrup of Roſes, or Syrup of Apples, or any other ſweetening thing.

If you deſign one Infuſion for ſeveral Doſes,

Take of Corents an Ounce and a half, beat them in a Marble Mortar, pouring upon them a pint and a half of warm Water. Then infuſe leaves of Pick'd *Senna* three Drams, Cream of Tartar one Dram, Violet Flowers three Pugils. Let them infuſe warm in a Glaſs well ſtopp'd. And when 'tis grown cold give three or four Ounces every Morning and Evening, or every other day. It is good for dry Hypochondriac Conſtitutions, and ſuch as are ſubject to a Conſtipated Belly. But it ought not to be kept above eight days. In Chronical Diſeaſes, and Inveterat quartan Fevers, the following Infuſion may be given before the invaſion of the Paroxiſm.

Take of the leaves of *Senna* three Drams, black Hellebor Roots a Dram and a half, Ginger half a Dram, Salt of Tartar two Scruples (if you pleaſe, you may add ſome ſweet *Calamus* Roots) chop and beat them ſmall, and tye them up in a Bag. Which infuſe in a Pint and a half of Water, or warm Ale. Set it in a warm place, and let it grow cold by degrees; let the ſick Perſon take two or three Drams every two or three hours.

I proceed to black Hellebor. 'Tis ſo call'd from its little black Roots, tho' it have white Flowers. It is endow'd with a Volatil ſharpneſs, not unlike that of Antiſcorbutic Medicines. Upon this Account it is a ſpecific for all Diſeaſes relating to the Nerves. It is never given in ſubſtance by reaſon of its extreme ſharpneſs; but only in infuſion, or by way of Extract. The Ancients were wont to infuſe it in Vinegar; but in vain: For all Acids are ſo far from Correcting Vegetable Purging Medicines, that they rather Impriſon them and elude their Operation.

The Watry Vehicles are beſt for Hellebor, which we generally infuſe together with *Senna*. Salt of Tartar is a proper Corrector for it. In a dry Scorbutic Conſtitution we infuſe it in whey, thus,

Take

Take of black Hellebor Roots two Drams, *Senna* leaves one Dram (if you please, you may add Polypody or Water Cresses) Infuse in a sufficient quantity of Clarified whey for a Night. In the Morning strain out three Ounces, and add to it a Dram of Spirit of Scurvy-Grass and two Drams of Cinnamon Water. Mix and make a draught for one Dose. Often-times the Hellebor is ty'd up in a Bag.

As for the Extract, the most Compendious way of making it is this.

Take of black Hellebor Roots slic'd a convenient quantity, infuse them in Rhenish Wine. Let them digest till the Wine has assum'd the taste and colour of the Hellebor, then thicken it to the consistence of a Rob. Some add Salt of Tartar. Some make this Extract with Spirit of Wine, but I should not dare to use it.

In a habitual Epilepsie the following Pills are very proper.

Take of Extract of black Hellebor half a Scruple, or fifteen Grains, sweet Mercury half a Scruple, or fifteen Grains, or a whole Scruple (according to the Circumstances of the Patient.) Extract of the Troches call'd Alhandal, from one to three Grains. With a sufficient quantity of the Essence of Mint or Sage, or Sassafras, make Pills.

For Cachectic Scorbutic Dispositions use the following Pill.

Take of *Quercetanus*'s Tartar Pills and Extract of black Hellebor, of each twelve or fifteen Grains. Prepar'd Scammony from one to three Grains. With a sufficient quantity of the solution of Steel prepar'd with Salt; make Pills for one Dose.

For all Chronical Distempers use this Pill, *viz.*

Take of *Ruffus*'s Pills *de tribus*, Extract of black Hellebor, of each half a Scruple; The Vitriol of Steel Calcinated till it become white, five Grains, prepar'd Scammony one Grain. With a sufficient quantity of the Essence of *Gum Ammoniac*, make Pills; which are of excellent use to Hypochondriac Persons.

Next to Hellebor comes *Aloe*. It is the Juice of an *Indian* Plant, and was frequently us'd by the Ancients. It has some Gummy Parts, and some Resinous. The former evacuate very gently. The latter are endow'd with a balmy astringent bitterness, and Entitle Aloe to the Character of an admirable Stomachic. These two parts are evidently distinguish'd by washing Aloe in Water; where the Gummy part

part is wash'd away, and the Resinous] remains. Yet some People are so foolish as to prescribe wash'd Aloe for a Purging Medicine.

'Tis no quick Purgative, and therefore scarce so proper for Acute, as for Chronical distempers, where gradual and slow Purgations are requir'd; and where the altering Medicines must keep pace with those which evacuate. For a Person subject to the Hypochondriac distemper, I've order'd the following Pills to be swallow'd down once in two or four weeks.

Take of lucid Aloe two Drams, *Gum Ammoniac* dissolv'd in Vinegar one Dram, Tartar prepar'd with Vitriol half a Dram. With a sufficient quantity of the Essence of *Gum Ammoniac*; make a Mass for Pills, of which take ten or fifteen two hours before supper, and they will purge gently next day. *N. B. Gum Ammoniac* ought to be dissolv'd, not depurated or evaporated, lest it sustain a loss of its better part.

The extract of Aloe may be made thus,

Take a convenient quantity of the Juice of Succory, or Roses or Violets; Infuse lucid Aloe into it. Let it stand for digestion, and 'twill Extract a mucilage; strain this mucilage and thicken it to the consistence of an Extract; Which may be given in Pills. Dose; one, two, or three Grains. Or thus,

Take of Extract of Aloes thus prepar'd half an Ounce, Extract of *Gum Ammoniac* two Drams, the Vitriol of Steel Calcinated till it become white one Dram, Troches call'd *Alhandal* twelve Grains. With a sufficient quantity of the Essence of Steel, make a Mass for Pills.

Next to Aloe the most useful Purging Medicine is Rhubarb; Which, if it be Genuine, is Imported hither from *Sina*. It enjoys a Volatil sharpness lodg'd in a watry mucilage, which causes evacuation; but is so subtile that the least heat drives it away. And when it is gone, the remainder is a fix'd, bitter, pacific substance; which is admirably fitted for removing Loosenesses, comforting the Liver, and redressing the disorders of the Kidneys.

If it be given in Infusion, prescribe thus,

Take of the tops of lesser Centory one handful, choice Rhubarb two or three Drams, Leaves of *Senna* a Dram, *Salt* of *Tartar* half a *Scruple*. Infuse in a sufficient quantity

tity of *Wormwood* Wine for a Night. Strain it in the Morning and exhibit three Ounces.

For the *Jaundice* and other disorders of the Liver, we commonly prescribe a large infusion for several Doses. As,

Take of Corents beaten from an Ounce to an Ounce and a half, choice *Rhubarb* from half an Ounce to six Drams, *Cinnamom* two Drams. Infuse in a Pound and a half of Water. Let them stand for four and twenty hours in a close Vessel put into hot water. 'Tis a very Pleasant Potion for several Doses.

It is also given in Powder; as for Dysenteries, Bleedings, *&c.*

Take choice *Rhubarb* and burnt *Hartshorn* of each half a Dram, Extract of *Venice* Treacle four Grains (or instead of it, a Grain and a half of *Laudanum Opiatum*) distill'd Oyl of *Cinnamom* one or two drops. Mix and make a Powder.

Toasted Rhubarb, tho' commonly us'd in this case, is a Medicine of no efficacy. Rhubarb it self in Powder being infinitely better.

The following Electuary is a Sovereign Medicine for the yellow Jaundice.

Take of Raisins bruis'd four Ounces, choice Rhubarb reduced to fine Powder half an Ounce, with a sufficient quantity of solutive Syrup of Roses, make an Electuary. Of which, let the Patient take about the bigness of a Nutmeg.

Some make an Extract of Rhubarb with Spirit of Wine; but 'tis good for nothing. Some make it with Water, which is better than the former, tho' not extraordinary. Some make *Elixir Proprietatis* with Rhubarb, and 'tis an excellent Medicine.

The remaining Purgatives are Scammony and Coloquintida, which are seldom exhibited alone, but added to other Medicines. They are very useful, where we desire to abridge the quantity of a purging Medicine. As for Example.

Take of Pills of *Hiera* with *Agaric*, *Quercetanus*'s Pills of Ammoniac, of each half a Scruple; prepar'd Scammony two Grains, *Troches* call'd *Alhandal* one Grain. With the Distill'd Oyl of Mace make Pills. Or,

Take

Take of the Mass for Pills of *Hiera* with *Agaric*, twelve, fifteen or twenty Grains; Gum Ammoniac dissolv'd in Vinegar half a Scruple, Scammony Prepar'd with Sulphur two Grains, Extract of Troches *Alhandal*, one Grain. With a sufficient quantity of the Essence of Wormood, or Sassafras, make a mass for Pills. If you please, you may add half a Scruple of Extract of Wormwood. They are of Universal use, as likewise what follows.

Take of *Andernius's Extractum Catholicum*, and of Crollius's *Extractum Panchymagogum*, of each half a Scruple, Gum Ammoniac dissolv'd in Vinegar twelve grains, Scammony Prepar'd with Sulphur, and Extract of Troches *Alhandal*, of each one or two grains. With *Elixer Proprietatis*, or Tincture of Tartar, Make Pills.

Scammony is used likewise in Powder. As,

Take of Tartar Prepar'd with Vitriol, twelve or fifteen Grains. Scammony Prepar'd with Sulphur, two or three Grains. Troches *Alhandal* (or the Extract made of 'em) one or two Grains. Oyl of Aniseeds two drops. Mix and make a Powder.

If a Bolus be more acceptable.

Take of the Powder call'd *Hypochondriacus Laxativus* one Dram, prepar'd Scammony one or two Grains. With a sufficient quantity of solutive Syrup of Roses, make a Bolus.

Scammony is the Basis of the Powder call'd *Carnachini*, which is sometimes Laxative and sometimes Emetic. 'Tis this,

Take Resin of Scammony half a Scruple. Antimony fix'd and reduc'd to an *Alcali*, by the Addition of Niter, eight Grains. Cream of Tartar three Grains. Mix and make a Powder. *N. B.* that Antimony fix'd by Nitre is more proper than Diaphoretic Antimony.

Scammony enjoys both a Resinous substance which evacuates, and a Gummy substance which alters and melts down the humors. 'Tis a Medicine, that may be safely exhibited to Children, if mix'd with Saline Powders. As,

Take of Cream of Tartar fifteen Grains, Tartar prepar'd with Vitriol half a Scruple. Prepar'd Scammony two Grains. Troches *Alhandal* one Grain. Mix and make a Powder.

Resin

Resin of Scammony is a Medicine that I do not much admire. Scammony it self in Powder, and right prepar'd is best. I prepare it with Clarified Juice of Quinces, mixing them well together, and letting them stand for digestion. This Extracts a Mucilage which I take out and thicken. It may be us'd by way of Powder or Extract.

If an Emulsion be more Acceptable.

Take prepar'd Scammony from half a Scruple to fifteen Grains, pour upon it Rose-water sharpen'd with Oyl of Tartar, *per Deliquium*; and make an Emulsion according to Art. You may add a little Cinnamon-water, and sweeten it with Sugar or Syrup.

Coloquintida is a harsh Medicine, but if well prepar'd produces many laudable effects. The best preparation is with Salt of Tartar. If it stand and digest with Salt of Tartar for any considerable time, its sharpness vanishes, and the Bitterness only remains. Some use the Extract of it, and some tye it in a Bag; but I prefer the form of Troches.

I shall conclude the train of Purging Med'cines with sweet Mercury, or Mercurius Dulcis. 'Tis added to other Purges, in order to qualifie them for Chronical Distempers. As,

Take of *Crollius's* Extract, call'd Panchymagogum, or of black Hellebor, fifteen Grains. Sweet Mercury from half a Scruple to fifteen Grains. Scammony prepar'd with Sulphur a Grain or two. Extract of Troches *Alhandal* one Grain, or a Grain and a half. With the Essence of Mint or Sassaffras, make Mercurial Pills. Or,

Take of Conserve of Fumitory a Dram. Sweet Mercury from fifteen Grains to a Scruple. Prepar'd Scammony five Grains. With the Conserve of Rasberries, make a Bolus.

CHAP. III.

Of the Med'cines that provoke Urine.

THE third sort of evacuating Med'cines is Diuretic; some of which are Volatil, some fix'd. The Volatil are such as these. Take of Parsley-water two or three Ounces. Rest-harrow, or Winter Cherry-water one Ounce. Elixir of Juniper Berries (from similitude of taste call'd Malvaticum) six

Drams or one Ounce, or an Ounce and a half. Spirit of putrified Erthworms three Drams. Volatil Spirit of Tartar from half an Ounce to six Drams. Syrup of Ground Ivy, or Syrup of Fennel, from three to six Drams. Mix and make a Potion. Of which exhibit a spoonful at a time. Or,

Take of Ground Ivy-Water, Restharrow-Water, and Parsley-Water, of each an Ounce. Elixir of Juniper (call'd Malvaticum) an Ounce and a half. Rectifi'd Spirit of putrifi'd Earthworms three Drams. Spirit of Sal-armoniac a Dram and a half. Syrup of Ground Ivy an Ounce. Mix and make a Potion. Dose, two, three or four spoonfuls. Or, add three or four drops of distill'd Oyl of Turpentine, or six drops of Oyl of Juniper, in the room of Spirit of Sal armoniac.

You may likewise add Essential Salt of Tartar, or dulcified Spirit of Salt, or Quintessence of Urine.

Amelungius's Nephritic Tincture, is a powerful Diuretic. 'Tis made of Nitre, Tartar, Hungarian Antimony, and a sort of Flint Stones that are speckled with yellow spots. The Nitre is first dissolv'd in Simple Water, then the other Ingredients are added, and after Digestion the Liquor is drawn off by Distillation.

Michael's Carminative Spirit is likewise an excellent Med'cine for this purpose, which is drawn from Nitre, Tartar, and Spirit of Wine Tartarised; but above all, Amber with its volatil Salt and distill'd Oyl are the best.

All the Aromatic Herbs, but especially fleabane, are good Diuretics. Camphyr, Turpentine, Juniper, Human Urine, Earthworms, and their various Preparations, are likewise of the same Family.

The Juice of the Birch-Tree, provokes Urine more effectually than any other Med'cine. It ferments like Wine, and becomes sowre like Vinegar; and is an incomparable Med'cine for Nephritic Pains.

Next to it is the Infusion of *Spanish* Flies, which I prepare thus,

Take of the Powder of *Spanish* Flies one Scruple, Infuse them in three or four Ounces of the best Rhenish Wine. Let them stand in a warm place for several Days and Nights. Then strain it out through Paper. The Dose, ten fifteen, or twenty drops to be exhibited in a draught of warm Broth. Sometimes this Med'cine causes Ulcers in the Bladder and a pissing of Blood; but a large draught of Milk wit

with a little Salt of Tartar, will quickly remove these Symptoms.

For a Diuretic Decoction. Prescribe thus,

Take of the Leaves of Strawberries and Pellitory of the Wall, of each a handful and a half. Of the five opening Roots ten Drams. Winter Cherries and Juniper-berries, of each six Drams. The Seeds of the Ash-Tree and Red Vetches, of each three Drams. Cream of Tartar two Drams. Boyl them in Parsley and Winter-Cherry-Water. Strain out a pint and a half, in which dissolve Rob of Juniper two Ounces. *Fernelius's* Syrup of Marshmallows one Ounce. Spirit of Salt dulcifi'd with the Spirit of Strawberries, as much as sufficeth to give it a grateful sharpness. So much for Volatil Diuretics.

The fix'd Medicines that provoke Urine are all the fix'd Salts of Herbs, and the Artificial Compound Salts, as Tartar prepar'd with Vitriol, and the Salt call'd Digestivum Hypochondriacum; which is the Caput Mortuum, remaining after the Distillation of Sal-armoniac with Salt of Tartar. Gromwell-Seeds, Violet-Seeds, and the Emulsions prepar'd from them, belong to this Class. The forms of Prescription are these,

Take of Tartar prepar'd with Vitriol a Dram and a half. Salt of Bean-stalks and Broom, and Pigeons dung, of each half a Dram. Mix and make a Powder for several Doses to be taken in Wine. You may add the Distill'd Oyl of Turpentine, or of Juniper-berries.

Cream of Tartar, or Crabs Eyes, or Nitre, or Vitriol of Steel, or Volatil Salt of Amber, may be added by turns.

The natural Spaw Waters provoke Urine plentifully, as also the Spirit of Salt and dulcifi'd Spirit of Nitre.

If the form of a Bolus be desir'd, prescribe thus,

Take Rob of Juniper one Dram. Crabs Eyes prepar'd fifteen Grains. Tartar prepar'd with Vitriol half a Scruple. Mix and make a Bolus. Or, if an Electuary be more acceptable,

Take of Conserve of Violets one Ounce. Rob of Juniper half an Ounce. Crabs Eyes prepar'd two Drams. Arcanum Duplicatum one Dram. With a sufficient quantity of Syrup of Ground Ivy, make an Electuary. Which sprinkle with a few drops of the Spirit of Salt.

CHAP. IV.

Of the Medicines that procure Sweat.

THE diſſolution of the Blood and its ſwifter Circulation, cauſe the ſeparation of the ſerum, which is evacuated by the Glandules in the skin. The Med'cines of this fourth Claſs, are ſuch as produce theſe effects: Some of which are Volatil and others fixed. Of the firſt ſort are the Spirits and Volatil Salts, extracted from Animal and Vegetable productions, ſuch as Spirit of Hartshorn, Urine, Vipers, human Blood, *&c.* And the Spirits prepar'd from Vegetables by putrefaction. The diſtill'd Oyls of Amber, Tartar, Guajacum, and ſuch as are drawn from the Bones and other parts of Animals. All reſinous, aromatic, bitter and attenuating Vegetables, and their various compoſitions, as *Venice* Treacle, Mithridate, Diaſcordium, *&c.* They are preſcribed in theſe or the like forms.

Take of Volatil Salarmoniac fifteen grains, Camphyr two grains. Mix and make a Powder.

Take of Carduus Benedictus Water, an Ounce and a half, Spirit of Sal armoniac, a Dram; or Volatil Sal armoniac, a Scruple. Diſtill'd Oyl of Cloves, two drops. Syrup of Fennel, or Orange Peel, half an Ounce. Mix for a draught.

Take of Viper Graſs Water, an Ounce. Cinnamon Water, half a Dram. Spirit of Triacle prepar'd with Camphyr, half a Dram. Volatil Salt of Hartſhorn, twelve Grains. Volatil Salt of Amber, ſix Grains. Syrup of Scordium, half an Ounce. Make a Potion.

As for the fix'd Med'cines that procure ſweat, ſuch are all Lixivial Salts, well alkalis'd, and the fixed Sulphurs of Metals and Minerals. Antimony, Steel and Nitre joyned together, make a powerful Sudorific, as well as the Sulphur of Antimony and Steel. The Bezoar ſtone is an ineffectual Med'cine, by reaſon that there is not one of a thouſand that is Genuin. The ſtone cut out of Human Bodies is infinitely better, and a ſovereign Antidot in all Peſtilential Diſeaſes. We preſcribe ſuch Med'cines in theſe or the like forms.

Take of Diaphoretic Antimony, Hartſhorn not burnt, and Salt of Carduus Benedictus, of each twelve Grains. Mix

Mix and make a Powder, which is to be taken in the Morning fasting, in a warm Vehicle. Or,

Take of Simple or Chalybeat Diaphoretic Antimony, one Scruple. Salt of Carduus Benedictus, half a Scruple. Laudanum Opiatum, one or two Grains. Distilled Oyl of Cloves, two drops. Make a powder for one dose. Or,

Take of Hartshorn not burnt, fifteen Grains. Cinnabar of Antimony, half a scruple. Of the Golden Antidot (called Bezoardicum Solare) four Grains. Mix and use as above. For a Bolus,

Take of Conserve of Elder, or Conserve of Juniper, from a Dram to two Drams. Hartshorn not burnt from a Scruple to half a Dram. Diaphoretic Antimony, half a Scruple. Syrup of Rasberries, as much as sufficeth to make a Bolus. Or,

Take of Conserve of Elder, a Dram. Diaphoretic Antimony, a Scruple. Extract of Carduus Benedictus, six Grains. With a sufficient quantity of the Syrup of Fumitory. Make a Bolus.

If the Patient desire Pills.

Take of the Extract of Carduus Benedictus, from half a Scruple to a Scruple. Extract of Triacle, five Grains. With a sufficient quantity of the Oyl of Amber, make Pills. Or thus,

Take of the Extract of Woods, fifteen Grains. Extract of Saffron three Grains. With stinking Oyl of Tartar rectify'd, make a mass for Pills. So much for the separate Prescription of fix'd Sudorific's. But sometimes we joyn both the fix'd and Volatil together. As,

Take of Chalybeat Diaphoretic Antimony, one Scruple. Volatile Salt of Vipers, five Grains. And if the Patient be restless, add a Grain or two of Laudanum Opiatum, mix and make a Powder.

If a Potion be more acceptable.

Take of Scabious-water, Elderflower-water, Meadsweet-water, of each an ounce. The cold Saxon Cordial-water, six Drams. Diaphoretic Antimony, a Dram and a half. Hartshorn not burnt a Scruple. Volatil Salt of Hartshorn, half a scruple. Camphyr, three Grains. Syrup of Scordium, one ounce, or an ounce and a half, mix for a Potion. Or,

Take of Elderflower-water, an ounce. Triacle of Andromachus, or Fracastorius's Diascordium, a Dram. Volatil salt of Vipers, six Grains. Camphyr a Grain. Syrup

of Rasberries, half an ounce. Mix for a draught. Sometimes you may add the Quinteſſence of Urine.

Thus I have run over the Claſſes of the Med'cines, that reſtore the due Fermentation of the Blood, and correct the Juices of the Body. This may ſuffice for the Vital Faculty.

SECT. IV.

Of the Animal Faculty.

THE Animal Faculty lies under the influence of the Animal Spirits and Nerves. The Nerves are immediately nouriſh'd and ſupplyed by the Chyle; which, if it be faulty or Acid, communicates a noxious quality to them. Their ſtructure conſiſts of delicate fine fibres, ſome of which are diſtributed into ſmall Branches, and ſome gather'd into a Body, as the Brain, the Membranes, Tendons, *&c.* All motion depends upon the due ſtretching of theſe fibres, and the regular incurſions of the animal ſpirits. The ſpirits are diſorder'd by any accident that either impairs their ſtock, or irritates them beyond their wonted pace. This may be occaſion'd either by an external Cold, or a vicious Acid reigning within. The Oyly volatil Med'cines are at once qualifyed to ſubdue this prevailing Acid, and retrieve the ſpirits. Such are the Herbs commonly call'd Cephalic, as Roſemary, Mint, Sage, Marjoram, Lavender, *&c.* Likewiſe the Sulphurs of Metals, Spirits and diſtill'd Oyls, eſpecially ſuch as are drawn from Amber, and the parts of Animals. The artificial *Sal Volatile Oleoſum*, is admirably conducive to the Nerves. But *Sylvius*, who firſt diſcover'd it, was not ſo generous as to gratifie the world with the ſecret: Tho after all, 'tis no difficult matter to prepare it. The beſt is from Soot. 'Tis eaſily drawn from Amber, thus,

Take of quick Lime and Sal-armoniac, of each equal quantities, add to them a third part of Amber, mix and pour upon 'em a few drops of tartaris'd ſpirit of Wine. Diſtill thro a Glaſs Retort in Sand. Separate the Spirit that comes over from the Oyl, and rectifie it again. 'Tis a noble Med'cine for the indiſpoſitions of the Nerves.

Or,

Or, you may make it with other distill'd Oyls. As,

Take Cinnamon or Cloves, and pour upon 'em tartaris'd spirit of Wine. Let 'em stand for digestion, till the spirit of Wine becomes red. Then take the spirit thus tinctur'd and pour it upon equal quantities of quick Lime and Salarmoniac. Distill thro a Retort, as above, and it yields a urinous spirit tinctur'd with a golden or bloody Colour.

The spirit of Hartshorn succinated is very proper for this purpose: 'tis prepar'd thus. Take volatile Salt of Hartshorn, volatile Salt of Amber, of each equal quantities. Let the salt of Amber be depurated by repeated solutions in Water, or extractions with spirit of Wine. Mix these two Salts with rectified spirit of Hartshorn, and in order to procure a strict union distill several times.

If you be oblig'd to an extemporary prescription, use the following.

Take of Mint, Fennel and Baum Waters, of each one ounce. Essence of Castor three ounces. Succinated spirit of Hartshorn two drams. Spirit of Sal-armoniac, one dram. Laudanum Opiatum, two or three Grains. Syrup of Orangepeel, or of Cinnamon, six drams. Mix and make a Potion. Dose a spoonful at a time.

In exhibiting sharp and volatile Med'cines, we ought to have a special regard to the delicacy of the Nerves: Especially those in the mouth of the stomach, which lye more open and expos'd to the injuries of a fierce Med'cine. Therefore we see that persons Obnoxious to Anxieties, Swooning, and such like disorders of the Spirits, complain most of their breast and Stomach. And Women, or Children, whose Nerves are more delicate and fine than those of men, are apt to receive more sensible impressions in the Stomach from an active med'cine. Besides, if the stomach be offended, the other parts will share in the injury, by reason of the sympathy maintained among 'em by means of the Nerves. Sometimes one and the same Nerve visits several parts and causes a mutual consent, as the under Lip and the mouth of the Stomach. Sometimes when two Nerves are Contiguous, the one influences t'other, as when a stone in the Bladder provokes the *Intestinum Rectum.* Sometimes the parts are Connected by nervous Ligaments, and so are render'd sensible of one another's Circumstances, as the head and the stomach, the stomach and kidneys, *&c.*

These Nerves are the source of motion. They serve to convey the Animal Spirits to all the parts of the Body, in order to their reciprocal contraction and relaxation.

When the motion of any Member is irregular, it proceeds from one of these three Causes,

1. Either the Animal Spirits are scanty and deficient, or Lazy and Unactive. In this case we use the Oyly Volatil Salts, and all Cordial, Cephalic and Aromatic Medicines. Or,

2. The Nerves are relaxated and rendered flaccid by a prevailing lymph, whether sharp or acid. This yields to the same remedies with the former. Or,

3. The Neighbouring fibres are overcharged and forced to enormous motions, by the impetuous incursions of the Spirits. In this Case Pacific Medicines are very proper. But they are generally suspected, unless very well prepared. Opium is the head of 'em all; and may be prepared either by Fermentation or Digestion with fix'd Salts.

Helmont prepared it with Juice of Quinces, repeating the Fermentation thrice, and then dissolved it in Spirit of Wine. Some set it to ferment with the Juice of Apples, or any other Stomachic. *Langelot* mixed it with Juice of Quinces, and set them in a moderate heat to ferment. By this process (says he) the stinking Sulphur is carried off, and the gross Earthy parts fall to the bottom, while the light and frothy parts are mounted higher: And between these two we find a transparent Liquor, a little reddish; which we separate and reduce to the consistence of an extract; and then circulate it for a Month or two with rectify'd Spirit of Wine. He extolls this for a noble Med'cine, but I never could see any extraordinary effects produc'd by it.

The second and better way of correcting Opium, is Digestion with Salt of Tartar and Spirit of Turpentin. 'Tis a powerful Medicine, reserved by some for a Nostrum. Some prepare it thus,

Take of Opium, Salt of Tartar, or Oyl of Tartar, *per Deliquium*, of each an ounce. Let 'em stand for Digestion. Then pour upon 'em two or three ounces of Spirit of Wine. It yields an excellent Tincture, which is to be strained and

and reserved for use.——*Conerdingius* prepared his Hysteric Laudanum, thus,

Take of Laudanum Opiatum, prepared by fermentation, two drams. Extract of Zedoary a dram. Extract of Castor, fifteen Grains. Of the Powder called Diacalaminthes, a scruple. Saffron half a dram. Eastern and Western Bezoar stone of each half a scruple. With distilled Oyl of Amber, make Pills. Dose six grains, to be taken with sugar. The want of this may be supplyed by an Extemporary Prescription. As

Take of the Extract of Zedoary, twelve Grains. Extract of Castor, six grains. Laudanum, prepared by Fermentation, four grains. With a sufficient quantity of distill'd Oyl of Amber. Make six Pills for three Doses.

SECT. V.

Of the choice of Practical Authors.

IN pursuing my design of gathering the whole Practice of Physic into one Body, I have proposed *Sylvius* and *Willis* for my pattern. Both of 'em joyned together are a fit subject of imitation: Tho', if consider'd separately, either of them is lyable to Censure. The former, 'tis true, had a happy way of referring all the Corruptions of the Humors to the vicious effervescencies of Acids and Alkali's. But he stretched the Notion too far, in imagining a strife betwixt the descending Lymph and ascending Bile, in the right ventricle of the Heart; and in ascribing several effects to the conflicts of the Choler and Pancreatic Juice, which perhaps were only owing to the fermentation of the Choler alone. Moreover, he attributes a great many Symptoms to the Vapours arising from the Combatant Juices in the first Passages, which properly proceed from the mutual Correspondence of the Nerves. Upon the other hand *Willis* has set us in a clearer light with reference to Convulsive motions, and the contraction of the Muscles; but his Elastic power will never be regarded, while the Convulsions and Cramps of the Nerves are so probably accounted for, by assigning the prevalency of an Acid, or some such grating substance, for their Cause.

These

These two Authors joyned together are the flower of our Modern Writers, and as such I recommend 'em to young Students.

As for Antient Writers, *Senertus* may justly claim the precedency, or in the room of him *Forestus*. *Helmont* indeed is an Author that ought to be read by all serious Practitioners. Since *Paracelsus*, we have none that surpasses him. But whoever would profit by reading his Writings, must arm himself with patience, and deliberately weigh each period as he proceeds. In the next place, he must be equip'd with a competent knowledge of Chymistry and Anatomy, else he does but grope in the dark. And besides, what he reads he ought to retain as a Paradox, and not yield his assent, till maturer thoughts and succeeding experience have vouched for its certainty.

The Authors that have wrote Practical Observations, are *Borellus*, *Salmuth*, *Tulpius*, *Rhodius*, *Bartholinus*, &c. They ought to be read with Judgment and Attention; Every minute circumstance of the Patient ought to be nicely consider'd, in order to find out the true cause of the Distemper, and determine the precise case in which any particular Med'cine is crowned with success.

AN

AN ABRIDGEMENT OF *ETMULLERUS's* Practice of Physic.

BOOK I.

SECT. I.

Of the Animal Appetite, and the disorders 'tis Obnoxious to.

THE most natural method of describing the Diseases Incident to Men, Is to follow the order of the Functions in the Body: Among which, those relating to nourishment do justly lead the van. The first function is to receive solid nourishment and distribute it thro' the Body. This reception we are prompted to by Appetit: Which is a desire of Solid Food, caused by the gnawing of a Volatil Acid in the Mouth of the Stomac; and encouraged by such Med'cines as promote it. This Acid is varied according to the different Constitutions of Men, and accordingly directs the Appetit to different Objects. It is likewise influenced by

by the remains of preceding Food, and so sways the Appetit to customary Meats. In like manner the Mother's Imagination will Tincture the Acid in the Childs Stomac, with an invincible aversion to some things. The least Apprehension or Natural Sense turns it. The Infants uneasiness from the Curdling of the Nurses Milk, when she is with Child in the time of suckling, will revive upon the sight of Cheese, and oblige him to avoid it for ever. So insensibly is the Acid sway'd, that without the direction of thought, it naturally abhors it.

This Appetit, or desire of eating is liable to these disorders. 1. It is either impaired or extinguished, or, 2. Depray'd and apt to covet improper Food. Or, 3. Increas'd to an unnatural degree. Of these in order.

CHAP. I.

Of the loss of Appetit.

THE place affected is the mouth of the Stomac. The general cause is the cessation of the uneasiness which the Acid ferment was wont to produce, by vellicating the Stomac.

The special causes are various. If the Nerves of the eight pair be disordered, the mouth of the Stomac becomes insensible, and so eludes the influence of the Acid. These Nerves may be disordered upon their own account, or by consent of other parts, as in Nephritick and Colic pains: Or, perhaps the Nerves are faultless, and the Spirits are stupify'd by the use of Narcotics, as Opium, or Tobacco; or diverted and imploy'd upon other things, so as not to mind the impulse of the ferment, as in the case of Love, Grief, Madness, *&c.*

If the Nerves or Spirits be not faulty, the cause must be lodg'd in the Stomac. Sometimes the Acid is blunted by a superfluity of viscid matter in the Stomac: or, the Spittle is become viscid and takes off its edge, as in Hectic and Hypocondriac Persons. (This last cause is effectually remov'd by drinking Wine, in which Elecampane Roots, Horse-Radishes and Scurvy-Grass have been infused.) The hasty swallowing down of much meat, drinking new and fermenting Liquors, cloying the Stomach with fat oyly things, or acid

and

and austere Fruits; do all cause a bluntness of the ferment. The frequent use of Brandy, or sulphurous Liquors, corrects the sharpness of the Acid and occasions an inappetency. The fatness and redundancy of the Bile, whether in the Blood or Stomac, may also vitiat the ferment. When this cause takes place, 'tis known by a bitter tast in the mouth, and a gnawing at the mouth of the Stomac. And Lastly, the suppression of wonted evacuations, as stopping of the terms, or a sudden abstinence from Venery, *&c.* may concur to the same effect.

Sometimes the Acid it self is deficient; if a Volatil Choler reign in the Blood, or the Spirits are so disorder'd by a Feaver, or otherwise, that the alteration of the humors and particularly of the lymph is not regularly performed; or if the heat of Summer exhausts the Spirits that should serve to exalt the ferment. Immoderate drinking, especially of whey which enjoys a temperat nitrous Salt, allays the accidity of the ferment. The frequent use of Alcali's, as Chalk, Hartshorn, and all Chalybeat medicines; little stones ingender'd in the Stomac, and the drinking of Urine (which is a specific in hungry Feavers) are frequently the causes of a weak ferment.

As for Prognostics. If it continue long in the beginning of a disease, it weakens nature, and adds force to the disease. If it does not decline along with the distemper, it portends a relapse. In Chronical Diseases and such as come by Fits, it is the forerunner of the Paroxysm. In Children it is more suspected than in adult Persons. If the Appetit seem to answer in general, and yet flags when Food is offer'd; or, if after a loathing of meat, the Patient of a sudden covets Food and swallows it down greedily, 'tis a very bad Omen.

In the method of Cure, a particular regard must be had to the difference of causes, (which may easily be distinguished without a long train of Diagnostics.) Generally the peccant cause is the abounding of slimy humours, or of Choler or Fat in the Stomac. This is only removed by evacuating Medicines; of which Vomits are the bast. One Vomit is of more efficacy in this case than ten Purges. As,

Take of *Mynsichtus*'s Emetic Tartar three Grains, fine sugar six Grains, make a Powder. Or, if a liquid be more acceptable, exhibit the Infusion of Crocus Metallorum, minding heedfully the quantity of the Liquor and not the Crocus.

When a viscid matter is lodg'd in the Stomach, 'tis fit to add some attenuating Ingredients. As, Take

Take of Hyſſop Water one or two Ounces, Cinnamon-water two drams, Vinegar of Squils, and the Emetic Syrup (above preſcrib'd) of each half an ounce, compound ſpirit of Verdigreaſe from two ſcruples to a dram, mix, *&c.*

If the Patient do's not Vomit eaſily, exhibit purging Medicines; among which Aloe is the beſt, but it ought not to be waſh'd. It is a common Ingredient in Pills, and operates but very gently. If there be occaſion for a ſtronger Purgative, Take the Pills of Hiera with Agaric, adding to them Gum-ammoniac, or ſome attenuating Med'cine. Thus,

Take of the Maſs of Pills of *Hiera*, with Agaric, from twelve to fifteen Grains; Extract of Wormwood (or Gum-ammoniac diſſolv'd in Vinegar) eight Grains, or half a ſcruple; Scammonium Sulphuratum, one Grain; Extract of the Troches *Alhandal*, from half a Grain to two Grains.

For thoſe who are obnoxious to Hypocondriac Fits, the following Pills are very uſeful.

Take of the Pills of *Hiera* with Agaric half a Scruple, or twelve Grains; Gum-ammoniac diſſolv'd in Vinegar half a Scruple, Scammony prepar'd with Juice of Roſes two Grains, extract of Troches *Alhandal* one Grain, with the Eſſence of Steel make Pills.

This purging Powder is likewiſe very good for Hypocondriac Perſons, and ſuch as are eaſily purg'd, *viz.*

Take of Tartarum Vitriolatum fifteen Grains, Scammony prepar'd with ſulphur four Grains, Troches *Alhandal* one Grain, diſtill'd Oyl of Cummin-ſeeds two drops. Make a Powder.

If a Potion be more agreeable,

Take of Hyſſop-water, Mint-water, of each half an ounce; Tartarum Vitriolatum, and extract of Agaric, of each ſix Grains; Scammony ſulphurated two Grains: Mix for a Potion. So much for purging Med'cines.

After gentle evacuations, we proceed to the uſe of ſuch Med'cines as ſtrengthen the walls of the Stomac, and reſolve the ſlimy Mucilage that ſticks to them. To this purpoſe all ſharp, volatile, and aromatic Ingredients are proper, as the Stomachical Herbs, Spices, the hot Seeds, and Antiſcorbutic's, eſpecially Horſes-Radiſhes. Thoſe of a gentle aſtringent quality reſtore the natural Conſtitution of the Stomach, when vitiated by the uſe of Opium, ſtrong Liquors, Brandy, *&c.* As for acid Med'cines, I cannot much approve them. I never ſaw any good effect produc'd by them in this caſe, unleſs it be by Cream of Tartar, and the dulcifi'd ſpirit of

of Salt, or of Vitriol. 'Tis true they are fit to provoke the Stomac, and imitate Nature in prompting it to crave Food; but the business of a Physitian, is rather to remove the Encumbrances that annoy the natural function, than to supply an artificial appetite. The Essence of Bread distill'd thro a retort, is a sovereign Restorer of the ferment. These Medicines may be prescrib'd thus.

Take of Wormwood, and Mint, of each a handful; Roots of Acorus two Drams, Gentian Roots half a ounce, the four hot Seeds of each two drams. Slice and chop 'em small: And tie them up in a Bag to be infus'd in Wine. Let the sick Person drink a draught twice a day, adding to every draught six Drops of dulcifi'd spirit of Salt. Or,

Take of Mint three handfuls; fresh Roots of Acorus, two ounces; Roots of Elecampane or Horse-Radishes, from an ounce to an ounce and a half; Zedoary Roots six drams, Cinnamon three Drams; put them into a Bag, to be infus'd in Wine.

If you desire to make it a little loosening,

Take of Mint two handfuls; tops of Wormwood one handful; Roots of Aron, Roots of crude black Hellebor, of each half an ounce; Roots of Elecampain, and the Leaves of pick'd Sennea, of each one ounce; Anniseeds, Fennel-seeds, of each six drams; Galengal, Zedoary and Ginger, of each two drams; Salt of Tartar three drams. Infuse as above.

When the Spittle is glutinous, and the Mouth tasts bitter, the Roots of Horse-radishes and Elecampane in equal quantities infus'd in Rhenish, or Wormwood-wine, or Pepper infus'd in like manner, or Wheaten-Bread dipp'd in Wine, or even a draught of good generous Wine, are approved Remedies; as well as *Thonerus*'s Decoction, thus.

Take of Cichory-Roots, of the Herbs, Roman Wormwood, Carduus Benedictus, and Rosemary, of each a handful; lesser Centory a handful and a half: boil them in equal quantities of wine and water, till the third part be consum'd. Dose half a pint morning and evening. *Pachequus* his Decoction of Agrimony, Wormwood, and lesser Centory, in Water may supply its room.

If you please you may add some temperate Acids: As,

Take of Mint-water two ounces, Cinamon-water from two drams to six Drams; Juice of Quinces, from an ounce to an Ounce and half; Syrup of Quinces, either simple, or aromatis'd, from half an ounce to six drams. Mix and

make

make a Potion, of which the Patient may take at pleasure.

The Spirit of Mastic and Spirit of wine, the dulcified Spirit of Vitriol given from twenty to thirty drops in a warm Vehicle about two hours before eating, the volatile Salt of Amber, *&c.* are proper in the same case. But they ought to be well qualifi'd, or joyn'd with vegetable stomachics, as in Elixir Proprietatis, which is a noble Medicine. For Example.

Take of Elixir Propietatis two Drams, Essence of Wormwood and Mint, or Aromatic Calamus, of each a Dram. Mix, *&c.* Or,

Take of the Conserve of the Pulp of Citrons an ounce and a half, Conserve of Mint vitriolated one dram, the red Hepatic Powder two drams, Spirit of Salt coagulated, two scruples, with a sufficient quantity of the syrup of Quinces spic'd, make an Electuary.

Michael's stomachical Elixir, is not improper in this case: As,

Take of Mint four handfuls; Roman Wormwood, Rosemary, of each two handfuls; Sage, Penny-Royal, Baum, of each one or two handfuls; Acorus-roots fresh three ounces, (or dried one ounce) Burnet or Elecampane-roots two drams, round Cypress-roots one dram; Mastic six drams, or an ounce and a half, or two ounces; the four hot seeds of each half a dram, Mustard seed six drams, of the shavings of Sassafras three drams; Zedoary, Galangal, of each a dram and a half, or two drams, or three drams; Cubebs, Nutmegs, Mace Cinnamon, Ginger, Cloves, of each three drams or half an ounce; Coriander-seed one dram; pour upon 'em spirit of Mint mix'd with as much of the spirit of salt, or Philosophical Spirit of Vitriol, (which is almost the same) as sufficeth for a grateful sharpness. Extract the tincture, strain it, and add as much of the compound stomachical extract, as it will bear. Dose fifty or sixty Drops. For a scorbutic and Hypocondriac Constitution, it may be mix'd with the spirit of Scurvy-grass, taking a dram and a half of the Spirit, to three drams of the Elixir.

Mynsichtius his *Elixir Vitrioli*, and the Essence of Amber, are much commended. And likewise Alcali's sharpened with other Salts. As,

Take the sharpest tincture of Tartar, and *Elixir Proprietatis* prepar'd without the Acid, of each three Drams. Mix, *&c.*

Sal-

Sal-armoniac is a good Stomachic, but it ought not to be joyn'd with fix'd Alcali's which drive away the volatile part of the Armoniac, and fix the remaining Acid. It succeeds better when joyn'd with spices. As,

Take of the Flowers of Sal-armoniac, or depurated Sal-armoniac, one dram. The powder call'd Diatrion Pipereon, or powder of Cubebs, or any other aromatic powder, a Scruple or half a Dram. Mix and make a powder for three or for doses, of which the Patient may take one every morning. Or,

Take of Aron-roots, half a Dram, black Pepper a Dram and a half, Ginger half a Dram, Flowers of Sal-armoniac two drams, distill'd Oyl of Aromatic Calamus a Scruple. Make a Powder.

Take of the Conserve of Wormwood tops, Conserve of Elecampane-roots, of each two Drams, candy'd Ginger six drams, powder of Diatrion Pipereon three drams, Sal-armoniac one dram, with the syrup of Quinces make an Electuary.

Some use Sal-armoniac in Wormwood-wine. Tartar also and its various productions, are very proper; as well as the saline stomachical powders, such as *Michael*'s, which is made thus.

Take of the powder of dry'd Aron-roots two Pound, the salt call'd Arcanum duplicatum one pound, salt of Wormwood, Arabian Costus, and Aromatic Calamus-roots, of each two ounces, Cinnamon and Cloves, of each an ounce and a half; Mace, Long Pepper, Ginger, Cubebs, Cardamoms, Grains of Paradise, Zedoary, and Coriander-seeds, of each one ounce. Mix and make a powder. Dose from a Scruple to half a Dram.

If a shorter Process be more agreeable,

Take of the powder of Aron-roots one dram, Arcanum Duplicatum two Scruples, distill'd Oyl of Mint six drops. Mix and make a powder.

If Inappetency be caus'd by the Animal Spirits, or the Nerves, take the Essence of Ambergrise and joyn it to other Stomachic's. Wine and all spirituous or Aromatic Liquors, especially the Essence of Baum and Penny-Royal, with a few Drops of the distill'd Oyl of Juniper-Berries, are very proper on this occasion. As also the Balsam of *Peru*, either taken in the Yelk of an Egg, or exhibited in Sugar or Wine, or in the form of a Tincture extracted with the Tincture of Tartar. And *Paracelsus* his stomachical Electuary, *viz.*

Take of the Rob of Juniper ſix drams, powder of Ginger half a dram, Aromatic Calamus, Mace, of each two drams, Cubebs one dram, with a ſufficient quantity of Sugar make an Electuary. Or, in the room of this,

Take of Cichory-roots candy'd, Vipergraſs-roots candy'd, of each one ounce; Conſerve of curl'd Mint, Conſerve of Roman Wormwood, of each an ounce and a half; Cerſerve of Cichory-Flowers, Conſerve of Roſes, Conſerve of Roſemary-Flowers, and Powder of Zedoary, of each one ounce; Aromatic Calamus, Ginger, and the ſharpeſt Cinnamon, of each a dram; of Mithridat, or Venice-Treacle two drams. With a ſufficient quantity of the Syrup of curl'd Mint make an Electuary.

When a redundancy of fat and bilious humours weakens the appetite, *Elixir Proprietatis* mixed with bitter Ingredients, is a proper Medicine. If Narcotics have ſtupyfy'd the Stomac, we exhibit acid Remedies. If at any time the uſe of acids diſorders the appetit, as it happens frequently in Hypochondriac caſes; the abſordent powders of Crabs-Eyes, Chalk, *&c.* and *Elixir Proprietatis* prepared without an acid, or with the Spirit of Sal-armoniac, may ſupply their room.

As for external Topic's; Liniments, Cataplaſms, and Fomentations may be uſed, being made of Wine, Elixir of Mint, Bread, and the Armatic Powders. *Crato*'s Oyl and Plaiſter are not amiſs. Or,

Take of expreſs'd Oyl of Mace a Dram and a half, diſtill'd Oyl of Cloves a Scruple, the diſtill'd Oyls of Wormwood, Mint and Juniper of each half a Dram. Mix for a Liniment.

Hartman's Stomachical Plaiſter, or Plaiſter of *Tacamahac*, mix'd with Balſam of *Peru*, is proper to be laid upon the Stomach. I have alſo ſeen many good effects produc'd by the application of a Vulturs skin to the Stomac.

SECT.

CHAP II.

Of the Depravation of the Appetite.

THE appetite is depraved when it avoids the proper, and craves improper food. In the former Case, it avoids some particular object thro the prevalency of prejudice, the memory of a preceeding surfeit, or the confluence of vicious Humours in the stomac. Those who are troubled with a bitter taste in their mouth, either through the use of Opium, or the height of a Fever, are averse to Hopp'd drink, by reason of the near resemblance between the taste of the Beer, and that which then annoys 'em: As the exhibiting of bitter Resinous purgatives will occasion an Antipathy to Ale. Upon this account we take it for a good sign in acute Distempers, if the Patient be able to drink Beer. Meat also is formidable to feverish constitutions, by reason that when eaten it is not digested, and so melts into a bitter musty Crudity. These are the causes of an acquired aversion to particular meats, or Liquors. The cure is performed by the use of Elixir Proprietatis, Wormwood, Mint, Quinces, Wine, and their various Productions, together with some Acid Spirits.

The most remarkable instances of deprav'd Appetites are what we call Pica and Malacia. The former is a longing for such things as are not fit to be eat, as raw Meat, Coals, Leather, Lime, *&c.* The latter is a violent and insatiable longing for usual food, as Herrins, and such like.

The part affected, is partly the orifice of the Stomach, where the appetising ferment is naturally seated; and partly the fancy and animal spirits. For tho the Vellication of the stomach constitute a general Appetit, 'tis the fancy that directs it to a particular Object. Besides, such things are often times long'd for, as are not objects of the Stomach, as the cracling noise of Cinders, the smell of Leather, *&c.* which makes it to appear, that the animal spirits, and the organs of Sense, are deprav'd as well as the stomach. That the sense of smelling is vitiated, is evident from the Pleasure such persons take in smelling to stinking unsavory objects. That the sense of tasting is likewise corrupted, may be infer'd from the depravation of the spittle, occasion'd by its affinity to the stomachical ferment; and is sufficiently

exemplified by their reliſhing and coveting the taſte of ſuch things, as at other times they abhor. The like may be ſaid of all the Senſes.

The Cauſe is the Alteration and Depravation of the ferment of the Stomac. We ſee that the various Modification of this ferment, in ſeveral Animals, creates in 'em contrary and diſtinct Appetites: By virtue of this diverſity of ferments, Men, Dogs, Cats, Geeſe, *&c.* are prompted to covet their peculiar Food.

The ferment is deprav'd by the corruption of Matter in the Stomac, which renders it ſaltiſh, ſharp, and in ſome meaſure corroſive, and conſequently apt to overact its part, by vellicating the Mouth of the Stomac in an unwonted manner, and prompting the fancy to purſue and entertain unuſual Objects, after the method of Melancholic Hypocondriac Fits, to which this Diſtemper is near ally'd.

The occaſional remote Cauſes are, the ſuppreſſion of the Terms, which occaſions the Stagnation and Corruption of the Blood, and by conſequence of the Lymph, which waters the Coats of the Stomac; Ulcers in the Throat diſtilling corrupt Matter into the Stomach: The ſuppreſſion of the Genital Liquor, or any wonted Evacuation, and an hereditary conveyance from Mothers liable to this Diſeaſe; which is equally compitable to Men and Women, Maids and Mothers.

The things coveted and long'd for in a Pica, are ſuch as are agreeable to the vicious ferment, which is ſo fierce and keen, that it digeſts without any trouble or harm, a great many noxious and offenſive Objects; provided their quantity taken down, do's not exceed the extent of the Appetite. 'Tis true indeed, that if abſurd and uncommon things are frequently eat, tho' in the mean time they occaſion no viſible diſturbance, yet they amaſs deprav'd humours in the Body, and ſo cauſe Dropſies, Cachexies, and many diſmal Symptoms. As for Child bearing Women, who are frequently obnoxious to irregular Appetites, if they cannot be diſſwaded by rational motives, they muſt be furniſh'd with what they long for, for fear of bad conſequences happening to the Child in the Belly.

The Cure is perform'd by evacuating the Stomac, and tempering the ferment. Vomits, and particularly Mercurius Vitæ, are very proper, if occaſional Circumſtances do not forbid 'em, ſuch as a natural difficulty of Vomiting the firſt and laſt Months of a Womans being with Child, *&c.*

in which case let Purges of Aloe, Extract of Hellebor, Coloquintida, and sweet Mercury be exhibited. It will not be improper to mix both the Vomiting and Purging Medicines with the things long'd for, that so the ferment eagerly joyning them may be carrird off. If the whole Mass of Humours be deprav'd, Antimonial Sudorifics are very convenient.

After Evacuation, let the vicious ferment be temper'd by moderate Acids, and palatable Stomachics, such as the Juices of Quinces, of Lemons, Citrons, Pomgranats and Oranges; the Water of the Sprigs of Vines, mix'd with Spirit of Treacle; Capers pickled in Vinegar, and mix'd with Carminative Seeds; Essence of Orange-peel mix'd with Essence of Saffron (in a suppression of the Terms;) the Decoction of Parsley-roots with Chiches, and especially Wine in which Mint and Wormwood are infus'd.

Take of the Vitriolated Conserve of Mint four Ounces, Powder of Zedoary a Dram or two, with Syrup of Quinces, make an Electuary, of which let the Patient take a convenient quantity thrice a day.

Take of Mint-water, Baum-water, of each an Ounce; Cinnamom-water prepar'd with Quinces six Drams; Juice of Quinces an Ounce; with a sufficient quantity of dulcify'd Spirit of Salt make a Potion. Dose a spoonful now and then.

Let Syrups or sweet things be sparingly us'd. Treacle and Mithridate are sometimes very useful. When other things fail, we must have recourse to Steel and absorbent Powders. Bleeding is of no direct use in this Disease, tho' in a suppression of the Terms or Plethora, it may be serviceable by removing the occasional Cause.

CHAP. III.

Of an Immoderate Appetite, and Dog Hunger.

AN extraordinary Appetite returning by intervals, and attended by Swoonings, is call'd *Bulimus.* If Victuals be speedily swallow'd down without chewing, and frequently vomited up, or at least so speedily digested, that the hungry Appetite is not discontinu'd, 'tis call'd a Dog Hunger.

The Cauſe of 'em both for the moſt part is a Volatil, diſengag'd Acid, call'd by the Ancients Melancholic, that gnaws and provokes the Mouth of the Stomac. Accordingly we find that Acids augment, and viſcous Anti-acids impair the Appetite. 'Tis true, a volatil Urinous Alcali, ſuch as the Bile, abounding in the Stomac may ſometimes increaſe the Appetite, and in that caſe Acids perform the Cure. If the Nervous Membrane of the Stomac be over ſenſible, and too eaſily provok'd, an extraordinary Appetite may likewiſe inſue thereupon.

Worms in the Stomac or Guts, may vellicate the Membrans, and ſo create an Appetite; and if the Digeſtion withal be eaſie and quick, it argues that there's an Acid Matter in the Stomac beſides Worms. 'Tis but very ſeldom that a *fames Canina* is periodical, neither is it follow'd by Fatneſs, by reaſon of the rough unpliable Craſis of the Blood. Long Faſting, and any immoderate Evacuation of Blood or Chyle, may be liſted into the number of its External Cauſes.

In a Bulimus the Cauſes are ſomewhat meeker, attended by a dullneſs or want of Spirits. When it ſucceeds to Chronical Diſeaſes, or when the Swooning Fits happen while the Belly is full, 'tis dangerous. If a Dog Hunger be attended by Vomiting and Looſeneſſes, it degenerates into Cachexies, Dropſies, Conſumptions, *&c.*

The Cure conſiſts in tempering and evacuating the Acid. The former Indication muſt be firſt ſatisfied; for if we attempt to evacuate the Acid in its vicious State, it will grow fiercer and more offenſive. The tempering Remedies are fix'd and volatil Alcali's, abſorbent Earthy Powders, and fat Oyly Medicines. The firſt kill the Acidity, as appears by mixing Salt of Tartar with Spirit of Vitriol. The ſecond ſuck up the Acid Particles, as is evident by the Experiment of Vinegar and Crabs Eyes. The laſt cramp and fetter the Acid.

Of the firſt ſort are the Vegetable fix'd Salts, Salt and Spirit of Urine, Spirit of Hartſhorn, Onions, Garlick, *&c.* Of the ſecond are Crabs Eyes, Coral, Pearl, Chalk, Blood-Stone, Bole-armenic, Seal'd Earth, Steel prepar'd without Acids, and mix'd with Opiats. Of the third ſort, are the expreſs'd Oyl of Sweet-Almonds, Linſeed, *&c.* diſtill'd Oyls of Aniſeed, of Caraway-ſeed, and eſpecially of Cloves; the Yelks of Eggs boil'd hard, or the Oyl of Eggs, hot Bread dipp'd into Oyl, *&c.* But if the Diſeaſe be attended by Vomiting,

Vomiting the Oyly Ingredients ought to be avoided, or their use discontinu'd, when the Hunger relents.

Take of the filings of Steel, and prepar'd Coral, of each half a Dram, prepar'd Crabs Eyes a Scruple, prepar'd Mother of Pearl, and Bone of Carp, of each a Scruple, Saffron half a Scruple, Laudanum Opianum two Grains: Mix for two or three Doses to be exhibited in fat Broth.

Besides the abovementioned Ingredients, some recommend the drinking of Wine, others Cockles, River Crabs, Pork, Brains fry'd with Butter, Rice boyl'd with Milk and Butter, Fistic-Nuts, Sweet-Almonds, *&c.* Sweet Generous Wines, in which Mint and Sage are infus'd, or the Spirits of those Herbs, or the Essence of Wormwood, Penny-royal, Baum, *&c.* mix'd with distill'd Oyls, are much approv'd.

Narcotics stupifie the Mouth of the Stomac, and upon that score are useful. But their Cure is only palliative. Treacle and Mithridate are the best of 'em.

The Acid being thus prepar'd, let Vomits be exhibited, or Purges, such as this.

Take of the Pills of Hiera a Scruple, choice Rhubarb in Powder half a Scruple, with Syrup of Roses, make Pills. Or,

Take of the Extract of Aloe prepar'd with tartaris'd Water, prepar'd red Coral, of each half a Dram, Gum-ammoniac dissolv'd in Vinegar a Scruple, Extract of Steel two Scruples, Extract of Troches Alhandal half a Scruple, with Essence of Myrrh make thirty Pills. Dose ten or fifteen.

A Bulimus is cur'd by generous Spanish Wine, or Frontignack, or a Medicinal Wine, with Cinnamon, Nutmegs, *&c.* infus'd in it. Bread dipp'd into this Wine, and applied to the Nostrils, or eaten, is much approv'd. Treacle dissolv'd in Wine is likewise very proper.

SECT. III.

Of the disorders of Thirst.

THIRST proceeds from the Vellication of the Gullet, Throat, Palate, Tongue, and adjacent parts, occasion'd by sharp saline Particles. The Liquor it demands is

naturally design'd for a Vehicle to the solid Food and Excrements. 'Tis disorder'd by way of Increase, Diminution or Depravation.

The two last are very uncommon. 'Tis true, there are some few Instances of a want of Thirst, among Children and Splenetic Persons; and wherever 'tis found, it must proceed from a redundacy of moisture about the Stomac and Throat, or the stupidity of those parts. Either of which Cause is remov'd by the use of Elixir Proprietatis, Tincture of Tartar, Tartar vitriolated, Arcanum Duplicatum, Sal-armoniac mix'd with Spices, Salt of Carduus Benedictus, *&c.* If it be caus'd by the inadvertency of the mind, and delirious disposition of the Spirits, as in Fevers, 'tis a bad sign, but yields to the general Cure of the Disease.

As for the Depravation of Thirst, or a particular aversion to some Liquors, and violent inclination to others, 'tis either a Symptom of a Fever, or accompanies a Pica or Malacia, and requires the same cure with its Companions.

CHAP. I.

Of Immoderate Thirst.

IT remains now to take a view of Immoderate Thirst, the only disorder of that Nature that requires consideration in this place. The part affected is the Throat, Gullet, and Mouth of the Stomac. The cause is either positive, or privative. The positive cause is a sharp Salt vellicating these parts, which, if it be lock'd up in a viscous Vehicle, is not so easily diluted as otherwise. This Salt is of an Alcalin nature, contrary to that which causes immoderate Hunger. The privative cause is the defect of Saliva, whose Office 'tis to water those parts, and dilute the Salts.

The remote external Causes are Purging Medicines, Pepper, Salt, Spices, Arsenic, sublimate Mercury, talking loud, sleeping with the mouth open, *&c.* The internal remote Causes are the prevalency of a bitter Oyl in the Choler, depraving the Lymph; an Oyly sharpness in the Saliva occasion'd by Catarrhs, extravasation of Serum, or a Scorbutic glutinous Lymph; the Deficiency, Glutinosity and Saltish sharpness of the Saliva, as in Fevers, Phthisicks, Hectics, *&c.* To which we may add the disorder, diversion or paucity

city of the Spirits, which hinder the due secretion of the Spittle, as in the instances of Weakness, Fatigue, Anger, Pain, *&c.* The heat of the Blood in the Lungs, and dejection of the Appetite in the Stomac, have likewise a great hand in causing Thirst. Sometimes Thirst is attended by a Feverish heat; at other times it is quite free of it, as in Scorbutic, Hydropic and Catarrhous cases.

In general, a sudden Thirst without any visible cause, prognosticates some Disease or other. If the Tongue be dry, the Mouth beset with a tough Phlegm, and the Body oppress'd with heat, and yet the Person be insensible of Thirst, 'tis an Argument of a Delirium, or great disorder among the Animal Spirits, or of the stupidity of the Tongue, and adjacent parts, and is justly look'd upon as a malignant Symtom. If in drinking the Liquor makes a noise as it falls into the Stomac, it is an Argument of the disorder of the Stomac. In Fevers it disappears together with them. But in Chronical Distempers, 'tis not so easily shaken off.

As for the method of Cure, the irritating cause must be first remov'd by Med'cines vary'd according to its nature. Such are partly austere Acids, partly temperate Med'cines which correct the sharp, or urinous, or oyly, or saline Particles. The Acids are Wood-sorrel, Prunes, Citrons, Quinces, Oranges, Pomgranates, Rasberries, Barberries, Corants, Cherries, and all their Juices; and especially Tamarinds, which not only abate the Thirst, but open the Body: The Juice of Houseleek, Vinegar, Strawberry-water: Tinctures of Roses, of Violets, and of Dasies; Cream of Tartar; Spirits of Vitriol, of Sulphur, of Salt, or the Spirit distill'd from equal Quantities of Sulphur, Antimony and Vitriol, dropp'd into the ordinary drink. The temperate Remedies are Milk, Whey Clarified with Citrons, Emulsions of Seeds, Raisins, Liquorice. *&c.*

The second Indication of Cure is to augment the quantity of Serum and Spittle by exhibiting Liquids alter'd with Wine or Cinnamon, or mix'd with Acid Spirits. Simple cold Water, tho' commonly us'd, is very noxious. Besides, 'tis not convenient to throw in too large quantities of Liquors for fear of loading the Stomac, therefore Gargles and Mucilages applied to the Tongue and Throat will not be improper. As for the Forms of Recipe's these following will suffice.

Take

Take of the Decoction of Barly one Pound, Juices of Citrons and of Quinces, of each two ounces; tinctures of the Flowers of Daſies and Roſes of each two Drams, ſyrup of the Juice of Citrons, an ounce and a half; ſpirit of ſalt as much as ſufficeth. Make a Julep.

Take of the Flowers of Daſies ſix drams, ſprinkle 'em with ſpirit of ſulphur, and infuſe 'em in two Pound of Barly-water, till it extract a tincture: ſtrain the Liquor, and add three ounces of the ſyrup of Rasberries.

Take of Tamarinds two ounces, ſmall Raiſins, bruis'd an ounce and a half, boil them in water, and infuſe in the ſtrain'd Liquor while it is yet hot an ounce of freſh Citron-peel. When 'tis cold ſtrain it out, and add half an ounce of the Tincture of Roſes. Make a Julep.

Take of Barly-water, a pound and a half, Cinamonwater an ounce, purify'd Nitre, or *Nitrum Antimoiatum*, from a dram to a dram and a half. Mix them for a Potion. This and all Nitrous Potions are proper for ſuch as do not agree with Acids.

In Scorbutic, Phthifical and Hydropic Caſes the ſaltneſs of the Lymph and Spittle is admirably well corrected by Whey mix'd with juice of Citrons, or with the juices of Scurvy-graſs and Wood-ſorrel. Spirits of ſalt and of Nitre are likewiſe very proper. Emulſions prepared from the cooling and milky ſeeds, and the decoction of China with Raiſins and Liquorice are likewiſe conducive to the ſame purpoſe. Acids in this caſe are improper. But Liquorice and Fennel-ſeeds boil'd are much approv'd. As,

Take of Barly a handful, ſmall Raiſins bruis'd an ounce and a half, Anniſeeds, Fennel-ſeeds, of each a Dram and a half, Liquorice-roots ſix drams: Boyl them in fair water till the fourth part be conſumed, adding towards the end a dram and a half of Cinamon. Strain out the liquor of which the Patient may drink at pleaſure.

Gargles of water; Smallbeer or water impregnated with Nitre, or the Juice of Houſeleek; or Mucilages of Quince-ſeeds, Fleawortſeeds, *&c.* extracted with Roſewater, or Phlegm of Vitriol, and mixed with the Juice of Houſeleek; applied to the Tongue and held in the mouth, are very uſeful; eſpecially when the Tongue is black dry and rough.

Some healthy Perſons are moleſted with Thirſt every morning, for whom Wormwood-wine is very proper. Others are thirſty thro Labour, Fatigue, and Exerciſe, for whom the ſpirit of wine is very convenient.

SECT

SECT. IV.

Of the Diseases relating to the Chewing Faculty.

HAving dispatch'd the Disorders of the Appetite, which is the first Spring of Nourishment; I am now arrived at the manner of receiving Food, It is first received by the Mouth, Chew'd and impregnated with Spittle; which being of a fermentative nature not unlike that of the ferment in the Stomach, prediſpoſes and prepares it for Digestion. Now if the Power of Chewing be deficient, or disordered, 'tis neither impregnated with Spittle, nor cut small so as to be fit for Digestion. The Disorders of this nature are such as respect either the Muscles imployed in that Motion, the Jaw-bones, or the Teeth. Of these in order.

CHAP. I.

Of the Contorsion of the Muscles of the Mouth, or a Dog Cramp.

THe temporal Muscles, and those common to the Cheeks and Lips, are the Instruments which move the under-Jaw-bone, in order to joyn it with the upper in the Act of Chewing. If they are seized with Convulsions or Cramps, the under Jaw-bone is inseparably united to the upper; if they be Paralytic, it falls down by its own weight, and they are not able to fetch it up. But these Cramps and Palsies never happen but when the whole Body is equally affected, and then they yield to the general Cure.

If one part or side of these Muscles be seized with Convulsions, or a Palsy, while the other is sound, the Mouth stands awry inclining to one side. In which posture one of the Eyes cannot be duly shut, neither can the Person pronounce the the Letter *O* with a full Mouth, or Spit but at one side of the Mouth. If it be a Palsy, the part affected is loose, soft, and follows the Motion of the sound Muscles, and the under Eyelid falls down; whereas if it be a Cramp, or Convulsion,

vulſion, the part is hard, and painful, and draws the ſound Muſcles to it.

As for the Cauſes of Convulſions and Palſies they are accounted for elſewhere. This Contorſion is a fatal Symptom in acute continual Feavers, or after an univerſal Appolexy or Epilepſy.

The Cure is accompliſhed by purgative Medicines, volatil and aromatic Sudorifics, decoctions of Woods, Caſtor given inwardly, or its Eſſence applyed outwardly, or its Extract rolled in the Mouth. Or,

Take of Nutmegs two Drams; Roots of Pellitory of *Spain*, and Angelica, Seeds of Staves-acre, Muſtard-Seeds, of each a Dram; Cumin-ſeeds and Cubebs, of each half a Dram, Pepper half a Scruple, Maſtic a Dram and a half, with Wax make Tablets to be roll'd in the mouth. The mouth may be waſh'd with Spirit of Wine, in which Caſtor is diſſolv'd, or the decoction of Pellitory-roots with Rocket-ſeeds. *Platerus* was wont to cure the Convulſive diſtortion of the mouth by Opiats mix'd with Aromatics, as Mithridate, Syrup of Poppies, *&c.* If the Caſe be Paralytic, Bliſtering Plaiſters may be applyed to the Ear, or Nap of the Neck.

As for the diſorders of the Jaw-bones: If they are diſjoynted by external Violence, Yauning or Gaping, they are eaſily ſet right by a Cuff under the Chin. If they are incumbred by Tumors or inflamations in the Throat, if their motion be cramp'd by the ſwelling of the Glandules behind the Ears, or the ſettlement of a tartarine thick Humour upon the conjunction with the bones of the Temples, the regular motion is retriev'd by the reſpective Cure of thoſe Cauſes. If the Antagoniſt Muſcles, that bring up and pull down the under Jaw-bone be reciprocally contracted, thro Cold, Worms, *&c.* there inſues a gnaſhing of the Teeth: Which in Fevers and adult Perſons, is an unlucky Symptom; and is cur'd by the external application of Balſam of *Peru*, and the removal of its Cauſes.

CHAP.

CHAP. II.

Of the Loss, Corruption, Blackness, Looseness, Numness and Chilness of the Teeth.

THe Teeth are nourish'd not only by the Arteries and Veins inserted into their Roots; but likewise by the Gums. When they are uncapable thro Age, or otherwise, to receive nourishment they fall out, or are ground away by continual use.

The causes which promote this their decay, are the abuse of Stupifying, or Narcotic, over cold, or over hot Medicines, or of Viscous and Corruptible things, which stick to the sides of the Teeth, and corrupt their Nourishment, such as Sugar, Sweet-meats, Figs, Cheese, Milk, *&c.* The Scurvy, Salivation, handling of Mercury, external Violence, *&c.* The Cure consists in removing the Causes. If Mercury be the cause, Leaves of Gold or Solar Preparations are very proper.

Sometimes the Teeth are corrupted thro' the acidity of their own direct Nourishment, or of that received sideways from the Gums. External Injuries are apt to produce the same Effect. At first there appears a black spot in the Tooth, then it becomes a Hole, and the Tooth grows hollow; the corrupted matter lodg'd within corodes the Tooth, causes pain, and sometimes reaches the Gums and Jaw-bone, creating Ulcers, which degenerate into Fistula's. Sometimes the corrupted matter degenerates into Worms. Sometimes the Teeth stink and infect the Breath, by reason of corrupted Meat sticking in their Chinks, or in hollow Teeth.

If the Corruption be confirmed, it cannot be Cur'd without drawing the Tooth. The Juice of Sun-spurge mixed with Sal-armoniac and Flour, and put into the hollow-Tooth, will render the operation easie; the Juice of Celandin the greater, or a bruised Grashopper, are proper for the same purpose. Or,

Take of Gum-ammoniac, Henbane-seeds, Juice of Henbane, of each a dram and a half; with the fat of Green Frogs and wax make an Ointment, to be applyed to the Tooth before 'tis drawn.

If

If the Corruption be not too far advanced, a ſtop may be put to its further progreſs by applying an actual Cautery; and afterwards filling the Tooth with Gold-leaf beat up with Myrrh and Wax; or with Turpentine; or with the Decoction of Ginger in Oxymel; Or,

Take of prepar'd red Coral, bone of a Cuttle, and burnt Hartſhorn, of each two Scruples; choice Myrrh, half a Dram; Camphyr, five or ſix Grains, with the mucilage of Tragacanth make Pills, to be put into the Hollow Tooth. Some chooſe potential Cautery's inſtead of actual ones, as Aqua-Fortis, or the Spirit of Salt.

If the Teeth ſtink let 'em be waſh'd with Water, in which Sal-armoniac is diſſolv'd. If they are infeſted with Worms, waſh 'em with the Decoction of Savin in Wine, or apply the Spirit of Sulphur with Cotton, or let the fumes of burnt Henbane-ſeed be receiv'd at the Mouth.

Sometimes if the Gums be flaccid, looſe, or otherwiſe diſorder'd, the lateral Nouriſhment they afford to the Teeth is viciated, and ſticks like an Excrement upon their ſurface, and either grows hard like a friable Stone, or blackens and diſorders the Teeth. Hence we ſee that whatever affects the Gums, as the Scurvy, Mercurial Salivation, *&c.* is follow'd by a blackneſs, and ſordid colour of the Teeth.

If this Symptom be recent and not confirm'd, let the Teeth and Gums be rubb'd with the following Powder.

Take of burnt Hartſhorn, three Ounces; Coral a Dram and a half; Roots of Florentine Orris, two Scruples; burnt Allum and Salt of Tartar, of each a Scruple, make a Powder to be ſprinkled with Spirit of Scurvy-graſs, adding ſome drops of the diſtill'd Oyl of Cloves.

If the Excrement be ſtiff and confirm'd, let Spirit of Salt mix'd with Honey be applied to the Gums and Teeth. Or, Take a Polypody-root, and ſoak it for the ſpace of four and twenty Hours in Wine ſharpen'd with Spirit of Sulphur. Then dry it for a Powder for the Teeth. Let the Teeth and Gums be waſh'd every Morning with human Urine, and after eating with Plantan and Houſeleek-water, in which Sal-armoniac and Salt of Tartar are diſſolv'd. The Powders of hard ſtones, ſuch as Flint, Pumice-ſtone, *&c.* are not ſo convenient, unleſs it be in a very inveterate caſe; becauſe they conſume the Gums.

As

As touching the looseness of the Teeth, 'tis occasion'd either by their own intrinsic fault, of which above, or the relaxation of the Fibres of the Gums, which frequently proceeds from the sharpness of the Saliva, or Serum, as appears by the aptness of the Scurvy, Tooth-ach, and Mercurial Salivation, to cause it. Opiats also, us'd for the Tooth-ach, sometimes cause a looseness of the Teeth by relaxating the Fibres of the Gums.

If it be inveterate it may run to that height that the Gums are exulcerated, corrupted and dispos'd to a Gangrene. Sometimes if the Texture of the Gums is very solid, and relaxating Causes assault it, it shoots up a loose flaccid sordid sort of Flesh that twines about and covers the Tooth.

The Cure consists in corroborating the flaccid Gums by Astringents, cleansing the Ulcers (if any there be) and preserving them from further Corrupiion. Tincture of Lac, with Myrrh, is a noted Medicine for this effect. Spirit of Salt with Honey of Roses, is also a powerful cleanser.

Take of the Flowers of Holy-hocks, half an Ounce; prepar'd burnt Hartshorn two Drams; burnt Allum, Nutmegs, of each a Dram. Make a Powder to rub the Gums with, after cleansing the Teeth, and washing the mouth with the following Gargle.

Take of Sage-leaves two handfuls; Flowers of Holy-hocks, one handful; Polypody-roots half an Ounce. Boyl them in fair Water. To a Pound of the strain'd Decoction, add Honey of Roses, two Ounces and a half; Antimonial Nitre, three Drams; burnt Allum and seal'd Earth, of each a Dram. Mix, *&c.*

Take of the Leaves of Sage and Scurvy-grass, of each three handfuls; boyl them in Milk. To a Pound of the strain'd Liquor add fresh Juice of Scurvy-grass two Ounces; Syrup of Columbines four Ounces. Mix for an Antiscorbutick Gargle.

For a Scorbutic Excrescence of the Gums, Spirit of Scurvy-grass mix'd with burnt Allum, is very proper; or the Decoction of small Houseleek with Allum and Honey; or a mixture of the Scum of Quicklime Water with Lac; or that of Vitriol and Rose-water.

If the Excrescence be over luxuriant, we must have recourse to the Decoction of Verdigrise and Allum mix'd with Vinegar, or the Ointment Ægyptiacum mix'd with Honey of Roses; or the following Powder.

Take

Take of burnt Allum and Sal-armoniac, of each a Scruple; Maſtic and Frankincenſe, of each half a Dram. Make a Powder to be rubb'd upon the Teeth, after waſhing the Mouth with the Decoction of Sage, Tormentil and red Roſes.

The numneſs of the Teeth proceeds from the Acidity of the Lymph, and is cur'd by chewing freſh Purſlain, or Cheeſe; or applying the white of an Egg boyl'd hard; but eſpecially by warm Urine.

The chilneſs of the Teeth, or their aptitude to ſhrink and ach at the approach of any cold thing, is cur'd by applying Treacle, or Spirit of Wine, or chewing hot Bread, or the Yelk of an Egg roſted.

SECT. V.

Of the Diſeaſes that hinder Swallowing.

THE Food receiv'd and prepar'd in the Mouth, muſt be forwarded by the Tongue to the upper part of the Pharynx, and thence convey'd downwards to the Stomac, by the ſucceſſive contraction of the Muſcles of the Gullet. This we call Swallowing. The diſorders 'tis obnoxious to, are ſuch as tend either to impair or deprave it.

Thoſe of the former ſort are occaſion'd by the Palſie of the Sphincter and Muſcles of the Throat; the Convulſion, or Contraction of the Gullet, cauſed by Hypocondriac, Hyſteric and Epileptic Fits, Worms, want of Spittle or Moiſture, violent Exerciſe, aſtringent Liquors, *&c.* Or the narrowneſs of its paſſage, caus'd by Tumors, Obſtructions and Inflammations either of it ſelf or of the adjacent parts: Or the Inflammation, Excoriation, Exulceration and Tumor of the upper Orifice of the Stomac; or its queaſineſs and averſion to Food; or Wind irritating its Muſcles to contract themſelves and deny admiſſion to the Food.

The Depravation of the Swallowing Faculty diſcovers it ſelf three ways. 1. When Liquors can be taken down, but no ſolid thing. 2. When ſolid things are eaſily reciev'd, but ſuch as are liquid are thrown up by the Mouth and Noſtrils; by reaſon that the Epiglottis does not duly cover the head of the Wind-pipe. 3. When ſome things both ſolid and liquid are eaſily taken down, and ſome are not. Of which more under the head of a queaſie Stomac.

In

In acute Diseases or Wounds, the Convulsion of the Gullet is fatal; as also its relaxation for want of Spirits. If any external thing taken down stick in the Gullet, it occasions Imposthumes, Ulcers, *&c.* and together with the corrupted Matter works it self out either upwards or downwards, or cuts out a new Passage through the neighbouring parts. If it reach the Stomac, it may either be voided by Stool without any harm, or cause Obstructions in the Pylorus, Looseness in the Guts, *&c.* according to its Nature and Bulk.

The Cure vary's according to the quality of the Causes. If the head of the Gullet is Paralytic, let the Decoction of Sage and Rocket-seeds in Wine, or the Infusion of Thyme and Lavender Flowers in Aqua-Vitæ with Castor, or the Essence of Castor mix'd with the Spirit of Venice-Treacle and Aqua-Anhaltina, be held in the Mouth. Let the Juice of Sage with Nutmegs and Castor, or Turpentine dissolv'd with the Yelk of an Egg in the Water of Primroses, or some drops of the distill'd Oyls of Amber, Sage, Anniseeds, *&c.* be gradually taken down. Let the Neck and neighbouring parts be anointed with Spirit of Earth-worms, and the distill'd Oyls of Cloves, Amber, *&c.*

If the Muscles of the Gullet be seiz'd with Convulsions, let Cephalic and Opiat Medicines be us'd both internally and externally. If want of moisture and extream dryness cause their contraction, let the mucilage of Quinces extracted with the Water of Frogs-Spawn be held in the Mouth, and insensibly swallow'd.

Hysteric and Hypocondriac Contractions of the Pharynx, are cur'd by Chalybeat and absorbent Remedies. Pins, Bones, pieces of Glass and such like pointed things swallow'd down and sticking in the Gullet, ought to be bronght back if possible by Sneezing, Coughing, or taking down liquid Vomits, and drinking in the mean while Oyly soft Liquors; or by the help of Instruments made for the purpose.

SECT. V.

Of the Hindrances of Chylification.

THE Food convey'd by the Mouth and Gullet into the Stomac, is there diſſolv'd, partly by the heat of the Stomac and adjacent Bowels, and partly by the ſaline and ſpirituous Juice in the Stomac; which likewiſe encounters the alcalin Salts of the Food, when diſſolv'd, and by means of a fermention works it ſelf into a volatil temperate milky ſubſtance, which we call Chyle.

That this ferment in the Stomac is an Acid ſalin ſubſtance, is ſufficiently made out by the Acid Belchings that attend even thoſe who are well; by the evident vertue which Acids have of promoting, and fat oyly anti-Acids of impairing the Appetite. The original of this ferment is the Lymph depoſited by the Glandules of the Stomac into its Cavity, where it meets the remains of Food, impregnated with Spittle, and render'd Acid by delay; and combines with 'em in the form of an Acid ferment.

CHAP. I.

Of Diſeaſes Incumbring or Extinguiſhing Chylification.

IF the Food be not ſufficiently elaborate in the Stomac, and in due time converted into Chyle; it remains unfit for nouriſhing the Body, as being nothing but a heap of crude Matter. Sometimes it melts into a fix'd viſcous Acid, that falling ſhort of its due thinneſs and volatility, is the ſource of all Chronical Diſtempers; which by the Ancients were imputed to the unequal diſpoſition of the Bowels, or the cold Conſtitution of the Stomac complicated with the heat of the Liver. This we call the Acid Crudity of the ſtomac. At other times it degenerates into a Cruditas Nidoroſa, a putrid Matter ſmelling like ſomething burnt or roaſted.

The cauſes of theſe diſorders are the deficiency, confuſion or flatneſs of the Spirits, thro' Weakneſs, Paſſions, Pains and want of Exerciſe; the corruption or fixation of the Acid ferment occaſion'd by vicious Acids, ſweet things, and ſuch

as tend to an Acid Crudity; or its dulneſs and inactivity, occaſion'd by the oyly Salt of the Choler abounding in the Stomac, eating of fat Food, as Eggs fry'd with a large quantity of Butter, and ſuch like, which produces a Cruditas Nidoroſa; the fixation and viſcidity of the Reliques of preceding digeſtions in the Pleats of the ſtomac, following the prepoſterous adminiſtration of fix'd abſorbent Powders in Fevers; eating of diſagreeable and unwonted Food, which reverſes the Seminal Craſis of the ferment, and requires a new proportion of digeſtive Salts; (whereas the Food that the Appetite calls for, and is by cuſtom well acquainted with, meets with a more welcome reception from the ferment, that is in ſome meaſure ally'd to it by vertue of the remains of food of the ſame Nature lodg'd in the Stomac) the Relaxation, Exulceration, Excoriation and Obſtruction of the ſtomac; its ſympathy with the Kidneys in Nephritic Pains, *&c.* Theſe Cauſes relate to the ſtomac, and its ferment.

The Cauſes relating to the Object or Food receiv'd, are gormandizing, or over-charging the ſtomac and ferment; variety of contrary Meats which are not equally digeſted, one part remaining crude, while the other is already transform'd; departing from the uſual Meaſures and Seaſons of Eating, or anticipating Meals before the former be digeſted; croſſing the natural Appetite by preſſing ſuch things as are loath'd, and denying thoſe it longs for; abſtaining from Bread, or uſing ſuch as is not ſufficiently fermented and impregnated with that volatil Acid that ſo nobly promotes Digeſtion; hard, viſcous and oyly Food, or ſuch as is not eaſily diſſolv'd or mix'd with watery Vehicles; exceſſive Drinking, which over dilutes the ferment, relaxes the Fibres of the Stomac, and cauſes the Food to float unſteadily; Eating of ſolid Food without a ſufficient quantity of moiſture for its Vehicle; neglect of Chewing, *&c.*

The particular Cauſes of an Acid Crudity are the redundancy of Acid humours in the Body, the frequent uſe of Acids, whether open or occult, or of Spices and ſuch like ſharp things, as are apt to exalt an Acid.

Thoſe of a muſty Crudity are the recoyling of the Bile and Alcalin humours; the deficiency of Acids, as in acute Fevers; the undue ſtay of Food in the Stomac; or the contraction of the Pylorus ſtopping its Paſſage; uſing fat oyly fix'd or Chalybeat Ingredients; ſoon periſhing Fruits; in a word whatever is apt to corrupt, or contract a Nidor.

The ſymptoms of an impair'd Chylification are; a heavy pain about the ſtomac, and diſtention of the Breaſt, after eating; frequent Belchings, whether inſipid, putrid, ſulphurous, or reſembling the very taſte of the Food, tho' five or ſix hours after eating. Sometimes, eſpecially in Hypochondriac Perſons, the Face is inflam'd, and reſpiration is difficult while they lie on their Backs. In a morning their Mouth is beſet with a viſcous Phlegm. The Urine is ſometimes thin and watry, at other times thick and muddy. Sometimes a Vertigo happens attended by all the ſymptoms of the Hypochondriac Illneſs, which takes its riſe from the ſtomac.

The ſigns of an Acid Crudity, are Heart-burning, Acid Belchings; much Wind; the Conſtipation of the Belly, and the thickneſs and viſcidity of whatever is vomited up, whether Naturally or by Art. Thoſe of a muſty Crudity are theſe. In the Morning they perceive an uncouth aſhy taſte, like that of rotten Wood; afterwards a gnawing in the ſtomac, and loathing of Meat, with a bitterneſs in the Mouth; their Belchings reſemble the taſte of rotten Fiſh, or fry'd Eggs; the Belly is open and looſe, and what they vomit is either inſipid or bitteriſh.

As for Prognoſtics. An Acid Crudity is the fore-runner and cauſe of Intermitting Fevers, Hypochondriac Illneſs, Scurvy, Cachexies, Colic Paſſions, Arthritic and Nephritic Pains, Melancholy and forc'd Eruptions in the Skin. In a word 'tis the ſource of all the Chronical Diſtempers, which by the Ancients were imputed to the Obſtructions of the Bowels, Meſentery, Liver, Spleen, *&c.*

Chylification is the work of Nature, not to be compaſs'd by Art. Wherefore the Cure conſiſts only in removing the offenſive Crudity, cleanſing the ſtomac, and gently whetting the Appetite.

In the firſt place Antimonial Vomits mix'd with attenuating Ingredients are requir'd. Then Stomachical Purges of Hiera with Agaric, Aloe and Maſtic. Or,

Take of the Pills call'd Aloephanginæ, a ſcruple; Tartar vitriolated, ſix Grains; Scammony ſulphurated, two grains; Extract of Troches Alhandal (a noble Medicine for cutting pituitous humours) a grain and a half, with the Tincture of Tartar make Pills.

If a Liquid Form be deſir'd.

Tak

Take Wormwood, or Hyssop-water, Mint-water, of each half an Ounce; Tartar vitriolated, Extract of Agaric, of each half a scruple; Extract of Troches Alhandal, one grain; Scammony sulphurated, two grains; solutive Syrup of Roses, half an Ounce. Mix for a Potion.

Of Alterative Medicines Galangal and Ginger are much the best. Next are the Carminative seeds, Anniseeds, Caraway-seeds, Cumin-seeds, the four lesser hot seeds; Acorus-roots preserv'd; Nutmeg, not by it self, but in conjunction with stomachic simples; among which Mint and Wormwood lead the Van. Next to them are Myrrh, Zedoary, Rosemary, Sassafras, Quinces, dulcify'd spirit of Salt (an incomparable remedy) Spirit of Mastic mix'd with that of Mint. *Elixir Proprietatis* is an excellent Stomachic; but for Acid Crudities, it ought to be Prepar'd without an Acid, and mix'd with Spirit of Sal armoniac. For musty Crudities let it be Prepar'd with an Acid, and mix'd with Spirit of Scurvygrass. *Mynsichtius* his Elixir of Vitriol; *Michael's* Stomachical Elixir mix'd with the Asthmatic Spirit, or with the Spirits of Mastic and Scurvygrass; Essence of Baum mix'd with the Philosophical Spirit of Vitriol; as likewise those of Penney-royal, Mint, Rosemary, Sassafras and Myrrh; are all very proper. Wormwood-Wine is likewise useful. Or,

Take of curl'd Mint, wild Calamint and Wormwood, of each a handful: Elecampane-roots, Acorus-roots, of each an ounce; Galangal, three drams; Cinnamom, three drams: Mace, one dram, (tis very oyly and therefore a small Quantity will suffice) Anniseeds three or six drams. Cut, bruise and tie them in a Bag; to be infus'd in Rhenish Wine in a warm place for twelve hours. Let the Patient take a draught of the Infusion before eating, adding to every draught fifteen drops of dulcify'd Spirit of Salt.

The Rob of Juniper-berries with Ginger, Mace and Sugar, may be us'd by way of Electuary.

Sal-armoniac given in Wormwood-wine; Arcanum Duplicatum, or essential Salt of Tartar mix'd with Aromatic Powders; the Infusion of Aron and Elecampane-roots in Wine; Chocolat and Thea, are all of excellent use.

As for musty Crudities, Vomits, and gentle Purges of Rhubarb and Tamarinds are proper. Then precipitating Earthy Powders follow'd by Acid Juleps. As,

Take of Arcanum Duplicatum, two ſcruples; Prepar'd Cuttle-bone, a ſcruple; Powder of Nutmegs, ſix grains. Mix for two or three Doſes.

Take of Mint-water, an Ounce and a half; Cinnamom-water, two drams; Juice of Quinces, ſix drams; Syrup of the Juice of Quinces, half a Dram. Mix for a Potion. Dulcify'd Spirit of Salt, Spirit of Maſtic, Elixir Proprietatis, Ivory, Coral, Cream of Tartar, Quinces, *&c.* are all proper Ingredients, upon the like Indication.

Acid Crudities are removed by abſorbent Powders, and volatil Aromatics, ſuch as Scurvy-graſs, leſſer Centory, Wormwood, Rhubarb and eſpecially Ginger; volatile Spirits of Mint, Sage, Scurvygraſs, that of Sal-armoniac mix'd with Vegetable Spirits, Spirit of Tartar, Hartſhorn, *&c. Elixir Proprietatis* Prepar'd without an Acid, together with the fixed Salts of Wormwood, Carduus Benedictus, *&c.* the digeſtive Hypochondriac ſalt, Hartſhorn, Ivory, Crabs-Eyes, *&c.* Above all River-Cray-fiſh, together with the ſhells, are much approv'd. All Acids muſt be avoided, and after the Acid is vanquiſh'd, Purgatives adminiſtred.

Beſides internal Medicines, external Applications are proper for promoting Chylification. As,

Take of the Oyl of Mint prepar'd by Infuſion and boyling, two drams; expreſs'd Oyl of Nutmegs, a dram; diſtill'd Oyls of Mint, of Mace and of Cloves, of each half a ſcruple. Mix and anoint the Region of the Stomac. Balſam of *Peru* is very proper for the ſame purpoſe.

Take of Tacamahac, three parts; Gum-Caran, one part; ſoften 'em with Balſam of *Peru*, or diſtill'd Oyl of Mint, and make a Plaiſter to be applied to the Stomac.

A ſponge dipp'd in Wine impregnated with Stomachic ſimples, and applied hot to the Stomac, is alſo much approv'd.

CHAP. II.

Of Wind in the Stomac and Guts.

WHEN the Work of Cylification is diſturb'd, Wind oft times moleſts and diſtends the Stomac; which if it breaks upwards with a noiſe is call'd Belching; if it be diſcharg'd both upwards and downwards, 'tis call'd a dry Cholera.

Wind

Wind is somewhat different from Vapors and Exhalations, either of which is resolv'd by heat, and thicken'd by cold; whereas it undergoes no such alteration. Nay, 'tis neither heat nor cold that is directly concern'd in giving it a Being; 'tis only the vicious fermentation of a Preternatural Acid within a thick viscous Body. Thus we see that spirit of Nitre pour'd upon a Metallin soluble Body, boyls up into Wind and Noise. The like will happen in the distillation of Tartar, or the effusion of Vinegar or Juice of Citrons upon Coral or Crabs Eyes. In like manner Bread or new Wine, if fermented, will rise up with a windy noise; but if fermentation be neglected, no other process of boyling, macerating, distilling, *&c.* is able to produce this effect. And once more; if Apples be expos'd to the Sun, so as to undergo a fermentation by vertue of the heat, their Skin will chop and break to give way to the Wind, and no other management whatsoever can compass that end.

Thus 'tis made to appear that Wind is not pre-existent in the Liquors or Humors themselves; but newly created by vertue of the imprisonment of Acid and Urinous salts within a viscous Body, which they endeavour to attenuate and break through, when dissolv'd and put into motion by the addition of a ferment. Now that the Vehicle is viscid, is sufficiently made out by the tenacious gross Humors that are voided upwards by Vomiting.

The Part effected is the Cavity of the Stomac, and its upper Orifice. The immediate cause is already explain'd. To which we may add a violent compression which obliges the Wind, in pursuit of a larger space to move in, to break forth and forsake its narrow habitation; just as Air condensated displays its Elastic force, and seeks to enlarge its bounds, driving before it the contiguous interfering Bodies with a notable noise.

The remote Causes are the eating of viscous Food, and retention of Acid Crudities. Flatulent meats may be very apt to encourage a windy noise, but without the fermentation of an incloſed Acid they cannot of themselves produce it. Therefore 'tis that the same Meats will occasion such disturbances in Acid Constitutions, that are digested by other Persons without any disorder.

Some flatulent Distentions are natural, being produc'd by the Oyly Bile, and Acid Mucus of the Stomac and Guts, when their Cavities are empty, and projected by Nature to keep their walls from joyning, and continue the openness of their

Pores. As to the difference of Belchings, ſome are Acid, as in Hypochondriac Caſes, and after long faſting; ſome muſty, of which above; ſome anſwerable to the natural quality of Food receiv'd, as thoſe caus'd by eating Onyons, Radiſhes, *&c.* ſome quite inſipid; and laſtly, tho' very rarely, ſome are attended by a prodigious ſtink. Now the cauſe of flatulent ſtinks muſt be fetched from the Chymical Experiment of diſſolving fat ſulphureous ſubſtances with Alcali's and precipitating with Acids. As Antimony calcin'd with Nitre and Tartar in the Preparation of Crocus Metallorum, then diſſolv'd in Water, and precipitated with Vinegar yields a moſt noyſome ſmell; ſo the oyly ſalts of the Bile firſt reſolv'd and then precipitated by Acids, are indow'd with the like Quality.

The ſigns are theſe. If the Wind cannot force its paſſage the Breaſt or Belly is diſtended and perplex'd; if touch'd, it rebounds as it were; the reſpiration is very difficult, eſpecially when the Perſons lie on their backs; they are moleſted with violent Pains, and toſſing from ſide to ſide, they perceive a ſort of flatulent noiſe within; juſt before the Wind breaks forth, they complain of a vaſt perplexity in their Breaſt, but when it gains its Paſſage, are benefitted by it. Sometimes theſe flatulent Diſtentions reach the Neck and back, and occaſion a ſwelling about the Mouth of the Stomac, which prevents the breaking of Wind downwards, and reaps no advantage by thoſe which paſs upwards. And eating augments this Diſtention.

As for Prognoſtics. They are uſually the ſymptoms of a Hypochondriac Illneſs; and if they happen upon the recovery of a Diſeaſe portend its relapſe. If they continue long they threaten Dropſies. If they ſtink horridly, they are very malignant and contagious.

The Cure is perform'd by attenuating and diſcharging the viſcid Matter, diſcuſſing the Wind, and moderating its force. In the firſt place let Antimonial Emetics be exhibited; and next to them, the Stomachical Purgatives preſcrib'd in the laſt Chapter. After the firſt Paſſages are clear'd the oyly volatil ſalin ſimples are equally proper for tempering the Acid and attenuating the viſcous Humor. As for Example.

Take of Fennel and Mint-water, of each an ounce and a half; Carminative-water Prepar'd with Wine, an ounce; Spirit of Anis, Eſſence of Orange-peel, of each three drams; diſtill'd Oyl of Mace, five drops; Syrup of O-

range-

range-peel, six drams. Make a Potion to be taken by spoonfuls.

Chamomil, with the four hot seeds both larger and lesser, boyl'd in Wine, or their distill'd Oyls, or their Spirits mix'd with that of Sal-armoniac; Castor, or its Essence Prepar'd with Spirit of Sal-armoniac; Myrrh, Treacle, Orange-peel, Amber-grise, Cinnamom, and all Oyly Volatil-salts, are proper for the same purpose. As for Example.

Take of Coriander-seeds, half an ounce; Anniseeds, Fennel-seeds, of each two drams; Zedoary, Ginger, Galangal, and Sal-armoniac, of each a dram; Powder of Diatrion Pipereon, a dram and a half; aromatic Oyl of Sugar, two drams. Make a coarse Powder.

Balsam of Sulphur is of very good use, as likewise the aromatic compound Waters of the abovementioned simples; but above all the Carminative Spirit de Tribus, that is, the spirit distill'd from Tartar and Nitre with spirit of Wine tartaris'd, and rectify'd.

If Wind be accompanied with Flushings in the Face, and a notable heat, there is nothing comparable to the spirit of Nitre dulcifi'd with spirit of Wine, and impregnated with the vertue of Carminative simples, after *Sylvius*'s Method. *Sylvius*'s extemporary mixture is very serviceable in this case, *viz.*

Take of Fennel and Mint-water, of each two ounces; rectifi'd spirit of Wine, or *Matthiolus*'s Aqua Vitæ, or *Sylvius*'s Carminative Spirit, an ounce; spirit of Nitre, twenty drops; distill'd Oyl of Mace, six drops; Laudanum Opiatum, three grains; Syrup of Mint, an ounce and a half, Mix. Dose two spoonfuls.

As for inveterate Acid Belchings, five or six Pepper corns taken every Morning fasting are very useful; as likewise absorbent Earthy Powders mixed with Aromatics; Essence or Juice of Wormwood taken at Meals, and the Powders of Coral, Cuttle-bone, and Ostiocolla mix'd with spirit of Wine impregnated with Juniper. If the Wind proceed from a thick stubborn Mucilage, exhibit the Asthmatical Syrup mix'd with a double quantity of *Michael*'s Elixir for the Stomac.

Externally let the place affected be fomented with the Oyls of Chamomil, and of the Carminative-seeds; or with a mixture of Anis-water, spirit of Wine camphoris'd, and Treacle; or cover'd with a Plaister of Tacamahac, Balsam of *Peru* and Treacle.

'Tis

'Tis also proper to inject Clysters of Man's Urine, in which the Carminative Ingredients have been boyl'd.

SECT. IV.

Of the Diseases that hinder the Retention of Food in the Stomac.

CHAP. I.

Of Vomiting and Loathing of Meat.

HAving thus accompany'd the Food from its first entry into the Mouth, till its arrival in the Stomac, we are now to view the causes that disturb its repose.

That sense which with respect to external parts is call'd Pain, is Christened Irritation among the Internal Membranes; as the upper Orifice of the Stomac is said to be irritated when any Object grates upon, or displeases it. Now the natural result of Irritation is, that crowds of spirits are summoned in by the angry part, and upon their arrival it contracts it self. Thus the Mouth of the Stomac being extremely sensible, contracts it self upon the least Irritation, the natural consequence of which is a loathing of Meat, or denying admission to it when swallow'd; or, if it happen to force its passage, the imprison'd Wind belches out at the new open'd Gate. But if this contraction be continued to the Pylorus, or lower Orifice of the Stomac, its Fibres being stronger than those of the upper, throw up the contents, with a force sufficient to master the Passage, and hence insues a direct Vomiting. So that Loathing and Vomiting differ in this point, That the one is a contraction of the upper, the other of the lower Orifice of the Stomac.

Vomiting is said to be Essential, when the irritating cause is lodg'd within the Stomac. Such Causes are, a Wound, Inflammation, Ulcer, Gangren, or Schirrus of the Stomac or Pylorus; sharp Scorbutic salts conveyed thither in company with the spittle, or deposited by the Arteries; the vicious effervescency or recoyling of the Gall and Pancreatic Juice;

Juice; clotted Blood, corrupt Matter, or any Humor dislodg'd of its proper Habitation, and hurry'd into the stomac; the Assumption of sharp irritating Med'cines, Vomits, Purges, Poyson, &c. or of fat things (which relaxate the Fibres of the upper Orifice, and struggle with the Acid ferment;) Crudities, Worms, &c.

If the cause be seated elsewhere, the Vomiting is caus'd by consent, by reason either of the stomac's being one continued piece with the affected part; or of their mutual commerce maintain'd by the Nerves. Thus the disorders of the Bowels, Guts, Midriff, Head, Kidneys, Womb, Liver and Spleen, are frequently the causes of Vomiting. A Schirrus or Corruption of the Sweetbread, stagnation of the Seminal Juice in Widows and state Maids, and, in a word, whatever disturbs or inflames the Animal Spirits, will produce the same effect.

Vomiting is usher'd in by Anxiety and Trouble in the Breast, swimming of the Head, trembling of the under Lip, plentiful evacuations of spittle, and Convulsive motions of the stomac. An Essential Vomiting ought to be carefully distinguished from that which is Sympathical. If, when the stomac is empty'd by Vomiting, there remains still a Propensity to Vomit; if the stomac continue heavy and blown up, and nauseate Food; if acid or musty belchings insue, we take it for an essential Vomiting. If it be incorrigible and obstinate, usher'd in at first by a pain in the Breast, and after a day or two a loathing; in a word, if no fault can be fasten'd on the contain'd Humors, it proceeds from a Callosity, Schirrus, or such like disorder in the stomac. If it come in a surprising manner without the precedent signs of trouble in the Breast, Loathing, weak stomac, &c. 'Tis a shrewd Argument that it proceeds by consent from the disorder of some other part, that is not yet come to light.

If it be caus'd by a viscid Humor, 'tis hard to cure it. If the Chyle and Food be frequently thrown up, with a feverish heat, 'tis an ill circumstance. Long and continual Vomiting in Malignant Fevers, especially if the Matter be livid, blackish or fetid, is very dangerous. In benign Fevers, vomiting in the beginning, or height, is good. If it follow Wounds or Bruises of the Head, 'tis frequently mortal. The Periodical Vomitings of Hypochondriac, Scorbutic, and Splenetic Persons, are of a good Character. If the Matter vomited, be a mixture of Choler and Pituita, 'tis a friendly symptom, but either of them apart is more noxi-

ous.

ous. The vomiting of Worms, Excrements of the Belly, Clysters, *&c.* is much suspected.

Before we launch into the method of Cure, 'twill not be improper to take notice of the following Cautions: 1. That Critical Vomits, or those which happen in the beginning of benign Diseases, as well as those of Women with Child in their first Months, ought not to be stopp'd, unless they exceed measure. 2. That in Scorbutic Cases, absorbent mitigating Ingredients are more proper than hot, sharp Aromatics. 3. That a Vomiting of Blood ought to be curb'd betimes, for fear of exhausting the spirits. 4. In case of Worms, it ought to be incourag'd, and the Body kept soluble. 5. That in all Vomitings 'tis convenient to keep the belly open by gentle Purges and Clysters. But withal, the quantity of the Liquor for Clysters must be small, lest the Colon being distended, it should press or irritate the incumbent bottom of the stomac. 6. By all means let sleep be promoted. 7. All Vomitings occasion'd by assumption of Poyson, ought to be encourag'd and continued till the Poyson be rooted out. For which end fat and tempering Liquors are very proper; for that all Vegetable and Mineral Poysons are endowed with an excessive Acrimony. As touching Animal Poysons, indeed the case is alter'd. 8. That Inappetency, Loathing, and such like Infirmities of the stomac, ought to be obviated betimes by Vomits, lest delay remove the opportunity.

The general Indications of Cure are these. The remote causes must be remov'd; the exquisite sense of the stomac and fierceness of the spirits abated by Opiates; the stomac gratified with agreeable Aromatics, and fortified by Astringents.

The first Indication must be satisfied according to the variety of the causes. Gentle Vomits and Purges are convenient, if viscous Humors in the stomac, or Poyson, are blam'd as the cause.

For the second Indication Laudanum Opiatum is an incomparable and universal Remedy. Mithridate, Venice Treacle, and especially Diascordium, are entituled to the same Character. As for Example,

Take of Treacle half a dram, Laudanum Opiatum a grain, distill'd Oyl of Mace two drops, with Juice of Quinces make a Bolus.

The

The third Indication is answer'd by sweet-scented Aromatic, Stomachic Remedies. Such as are Quinces, Mint, Wormwood, Baum, Zedoary, Orange Peel, Mastic, Camphir, Cloves, Nutmegs, and especially Cinnamon; their Waters, Spirits, Essences, Extracts and distill'd Oyls. The Astringent Ingredients are *Quercetanus*'s Syrup of Coral, Syrup of dry Roses, Juice of Pomgranats, Vinegar with Zedoary infus'd, Elixir of Vitriol, and especially the Spirit of Vitriol of Steel, and Juice of Quinces. Seal'd Earth beat into a Pultise, with spirit of Vitriol, or that of Nitre, hardens into a stone; which if pounded and put into a moist Place, melts into a Styptic Liquor, of admirable use for all Astringent Indications.

Take of Mint-Water two or three ounces, Cinnamon-Water, six drams, Juice of Quinces an ounce, rectify'd spirit of Vitriol five or six drops, distill'd Oyl of Cinnamon three drops, mix. Take a spoonful now and then, adding sometimes one, two or three grains of Laudanum Opiatum: Or if the Person be very weak, a scruple of the Essence of Ambergrise; or in case of extremity, four or five Grains of Allum.

Venice Treacle mix'd with Vinegar, or formed into a Bolus, with Spirit of Vitriol, is much approved. In malignant Fevers Salt of Wormwood, with Juice of Limons; when the stomac is stuffed with thick Humors, Spirit of salt, or of Nitre with Treacle; and when the stomac is inflamed, or corroded, the Mucilage of Fleawort and Quince-seeds, with solutive Syrup of Roses, are very convenient.

Externally, let Aromatic and Corroborating Ingredients be boyled in Vinegar, and the warm Decoction applied with a spunge to the stomac; or let toasted bread, soaked in Vinegar, and covered with Aromatic Powders, be applied to the Region of the stomac. Spirit of Wine Camphoris'd, is very effectual in Fomentations. A bag may be quilted with Mint, Nutmegs, Cloves, Mace and Cinnamon, sprinkled with Treacled Spirit of Wine, and distill'd Oyl of Mint, and applied. Some commend the application of a bag of Saffron.

Liniments are composed of *Venice* Treacle, Balsam of *Peru*, or Oyls of Mastic, Wormwood, Quinces, &c. Or,

Plaisters may be made of Tacamahac and Gum Caran, with Aromatic Oyls, after the Example of *Crato*'s. Cataplasms are likewise proper, as,

Take

Take of the ſharpeſt Yeſt four ounces, Powder of Mint an ounce, of Zedoary ſix drams, Nutmegs three in number; Mace, Cloves and Cinnamon, of each two drams; Aniſeeds, Cuminſeeds, Fennelſeeds, of each three drams. With a little Vinegar of Roſes, make a Cataplaſm to be applied to the ſtomac.

When the irritating cauſe is tranſer'd from other parts to the ſtomac, Purging, Bleeding, and ſuch like diverſions are very proper. As Women with Child are ſometimes cured of vomiting by Blood-letting. When we are oblig'd to ſtop an artificial vomiting, 'tis convenient to exhibit Milk boyled with Bread, or Bread ſoak'd in Generous Wine; Inject Clyſters of Milk with Treacle; adminiſter Opiates, and apply outwardly as above.

If the Aſſumption of an harſh Purge diſpoſe one to vomit, there's nothing better than to chew freſh Citron Peel, or ſmell to toaſted Bread dipp'd in Vinegar, and cover'd with Powder of Cloves.

CHAP. II.

Of a Vomiting of Blood.

This ſymptom may be caus'd by the ſuppreſſion of the Piles or the Terms in Maids or Women with Child; Opening of a Vein or Artery, as that of the Vas breve, thro' the Obſtruction of the Spleen, which empty's its blood into the ſtomac; or the rupture of any of the Pancreatic Veins, occaſion'd by the ſharpneſs of its Juice, which Veins depoſite their blood into the Duodenum, and then it is voided both upwards and downwards. Sometimes the healing up of a ſordid Ulcer may occaſion it, by reaſon partly that the blood was formerly evacuated in the form of corrupt Matter, and partly that the Ferment of the Ulcer may have corroded the Veſſels in the Lungs. It ſucceeds frequently to Amputations, the blood being then crowded into fewer channels.

The ſigns are theſe. Arterious blood is fluid and reddiſh. If the vomited matter be of an obſcure colour, and clotted, reſembling the Liver, it comes from the Veins. If it incline to a black colour, be voided with a biting Pain, and attended by an auſtere taſte, 'tis not blood, but an acid corrupt humor, or Atra Bilis. If it proceed from the Rupture

of

of the Vas breve, 'tis usher'd in by a beating Pain in the left side of the Back, under the short Ribs.

The Vomiting of Atra Bilis is fatal, as likewise a Voiding of blood any way in the Small-Pox, Measles, or other Eruptions. If the Piles succeed to Vomiting, 'tis a good sign; as also if it come by Intervals in Splenetic and Chronical Diseases. If it be Critical, all is well.

The Cure consists in removing the Cause, diverting the blood from the stomac, fortifying the broken Vessel, attenuating and throwing off what is already extravasated. Blood-letting in the Arm or Leg, or opening the Hemorrhoid Vessels, must be premised in Cases of Plæthora's, or suppressions of blood. As for Astringents, the Syrup of the Juice of Comfrey-roots and Plantane Leaves (not clarify'd) mix'd with Sugar, is recommended by the Honourable Mr. *Boyle*, and mightily esteem'd in *England*. Water of Nettles, mix'd with spirit of Vitriol, is extoll'd by *Hartman* and several other Authors. Or,

Take of the Conserve of Roses two ounces, Prepared Blood-stone a dram and a half, Astringent Crocus of Steel (that is, Vitriol of Steel dissolv'd in Water, and precipitated with Oyl of Tartar *per deliquium*) a dram, white Henbane seeds two scruples; with Syrup of Parslain make an Electuary.

Take a convenient quantity of the Earth of Vitriol of Steel, well calcin'd and dulcify'd, dissolve it in spirit of Salt, draw off the spirit in a fire of sand till the residue come to the consistence of Honey. Upon which digest rectified spirit of Wine for some time, and strain the Tincture for use.

Take of Plantane and Tormentil-water of each an ounce, Cinnamon-water and Vinegar, of each six drams, Prepared Red Coral half a dram, Troches of Amber a dram, seal'd Earth half a dram, Mummy six grains, Laudanum Opiatum one grain, Syrup of Comfrey one ounce. Make a Potion.

If the Breast be perplex'd, the Pulse weak, Respiration difficult, the Stomach blown up, the Face Pale and liable to sudden Flushings, and the Person apt to swoon, 'tis a sign that the Blood is congealed in the stomac. In which case Crabs Eyes, Coral and Diaphoretic Antimony, and especially *Sperma Cœti*, are proper. After the stagnating blood is attenuated, the remaining Clots may be carried off by Rhubarb, or a gentle Vomit. If the Obstruction of the

the Spleen occasion the recoyling of the Blood in the Vas Breve upon the Stomac, Chalybeat and opening Remedies are most convenient.

Externally apply Treacle with Saffron and Vinegar of Rasberries to the Stomac.

SECT. VII.

Of Pains of the Stomac.

SOmetimes the Breast, or the whole Cavity reaching from the Mouth of the Stomac to the Midriff, Liver, Spleen and Sweet bread, is seiz'd with a Prodigious Uneasiness and Confused Pain causing the afflicted Person to toss up and down the Bed. This we call Anxiety. If this Pain be particularly fixed to the Pit of the Breast, attended by a seeming Compression, with a sense of biting and gnawing, 'tis call'd *Cardialgia*, or Pain in the Stomac. The former is wandring, arising from the least irritation, and is fitly resembled by the Anxiety following the Assumption of a Vomit. The latter is fixed, arising from a Convulsive Contraction, and is of the same nature as the Pain we are afflicted with, when we swallow any thing too hard or overbulky.

All Anxieties, excepting such as arise from Suffocation, or the disturbance of Respiration, are owing to the Constriction or Uneasiness of the upper and more sensible Orifice of the Stomac, as appears by their following the assumption of a Vomit, attending Hysteric Constitutions, and being abated by Belching; their accompanying Agues, and disappearing after Vomiting, and their being caus'd by the eating of heavy Suppers. The blame is usually cast upon the Heart, but very unjustly; for the Heart is an indolent muscle; and if it be irritated, is seiz'd with Convulsions, or what we call a *Palpitation*; which does not accompany Anxieties of the Breast.

The remote causes are, sharp Poysonous things taken into the Stomac, corrupt Food, Wind, Viscous Humors, or Foreign ferments translated thither, Inflammations and such like disorders of its Membranes, Convulsions of the Nerves or adjacent Parts, and in a Word, whatever provokes the Mouth of the Stomac to contract it self.

Anx-

Anxieties are usually Companions to other Diseases, whose peculiar cure must be taken care of. In General, Aromatic, Discussing Ingredients, together with Vitriol, and Nitrous Med'cines, are very proper.

The Pain in the stomac was by the Ancients call'd *Cardialgia*, by reason of the frequent Swoonings, Prostration of strength, and cold sweats that attend it; tho' in the mean while the Heart is not at all afflicted. The left Orifice of the stomac is its seat, as being the most sensible tender part of the whole Body, and richly stor'd with Nerves, that maintains a near Correspondence with all the Nervous systeme. This Pain is caus'd by the Preternatural fermentation of the Bile and other vicious Juices; 'tis attended by Inflammations; sometimes 'tis seated in the back of the stomac, and sometimes glides along the Gullet to the very Shoulders, or resembles the compression or squeezing of the Throat.

The remote causes are whatever offends the left Orifice of of the Stomac, or provokes it to Contraction. Nephritic Pains, Contorsions of the Backbone, Depression of the *Cartilago Ensiformis*, Stones in the Gall-Bladder or Duodenum, Tumors in the Mesentery and Sweetbread, Hysteric Passions, and suppression of the Terms, may occasion it by consent. The boyling of the Juices in the first Passages, in Intermitting Fevers, frequently produces this symptom, which is remov'd by Clysters. Wind in an empty stomac, an Acid viscid matter gnawing and piercing the upper Orifice, (which generally quickens about an hour or two after eating) green or rusty Bile Tinctur'd with a Corrosive acid from the Sweetbread, Corruption or Acidity of the Victuals; Tumors, Stones, or Ulcers in the Stomac; assumption of sublimate Mercury, Arsenic; Coagulation of Milk, or new Cheese, in the Stomac, occasioned by its mixture with an Acid, Worms in the Stomac, swallowing of Leeches (cur'd by salt Water) pieces of Glass, Pins, *&c.* Are frequently the Authors of the same disorder. Sometimes it is Periodical, according to the successive return of its causes.

The Symptoms of Anxiety, and Pain of the Stomac, are an Inexpressible sort of uneasiness about the Pit of the Breast, Inquietness, tossing, difficult Respiration and Swooning, usher'd in by giddiness, and follow'd by cold sweats and a pale Paleness in the outward Parts. If the Pain seizes the bottom of the Stomac, it ought to be carefully distinguished

from the Cholic, by obſerving if it creeps upwards, or deſcends to the Loyns and Kidneys; and if it accompanies other Diſeaſes, or comes by it ſelf; the former are ſigns of a Pain in the Stomac, the latter of the Cholic.

If Anxiety and Pain of the Stomac proceed from Worms or Wind, it is not very dangerous, tho' the Symptoms may ſeem diſmal. To Children it Prognoſticates Epilepſies, and to Adult Perſons Chronical Diſeaſes. If it ariſe from curdled Milk, or a green, ruſty, ſharp, viſcous humour, 'tis dangerous. If it owes its being to a viſcous, Pituitous Matter, 'tis not ſo violent. If follow'd by Convulſions, 'tis much ſuſpected; as alſo if it accompany acute Fevers.

The cure is perform'd by removing the offending cauſe, and abating the Pain. If it depend upon another Diſeaſe, it yields to its cure. If it be Eſſential, or accompany Fevers, there's nothing equals Antimonial Vomits, which prevent an infinity of diſmal Circumſtances. After Vomiting, Purges are proper. But by reaſon of their offenſiveneſs to the Stomac, let 'em be mix'd with Opiates; an uſeful contrivance for ſuch as are liable to Gripings, or over-purgations; or ſtuffed with Sharp, Scorbutic, Hypochondriac Humors.

Take of *Quercetanus*'s Pills of Ammoniac twelve grains, Magiſtery of Jalap five grains, Scammony ſulphurated, and Laudanum Opiatum, of each a grain; with Eſſence of Caſtor make Pills. Four or five grains of Fulminatory Gold may be added.

Take of Aloes half an ounce, Myrrh two drams, Maſtic a dram, Oriental Saffron half a dram, rectify'd Flowers of Antimony a dram; with ſolutive Syrup of Roſes make a Maſs. Doſe from fifteen to twenty four grains. This is the Compoſition of *Poterius* his Catholic Pills.

If it be caus'd by Wind, or the Steams of the Choler and Pancreatic Juice fermenting in the Duodenum, let Carminative Clyſters be injected; As,

Take of Leaves of Mint, Wild Marjoram, and Penny Royal, of each a handful; Chamomil Flowers, half a handful; Angelica Roots, half an ounce; Bayberries, three drams; Seeds of Anis, Carrets and Fennel, of each a dram. Boyl them in Water and Man's Urine. To Eight or Nine ounces of the ſtrain'd Liquor add of Lenitive Electuary and Electuary of Bayberries four or ſix drams, diſtill'd Oyls of Anniſeeds, and Fennelſeeds, of each half a ſcruple; Yelks of Eggs, in number one. Make a Clyſter to be injected

jected warm. 'Tis proper to add Salt of Tartar, by reason that at once it whets the Clyster, and attenuates the viscid humours.

Blood-letting is inconvenient, excepting the case of a Plæthora, or some notable suppression of blood.

The second Indication is satisfied by Opiats, as thus: Take of Chamomil water three ounces, Cinnamon-water one ounce, Elixir of Mint, or of Citrons, or of Oranges, six drams, distill'd Oyl of Chamomil six drops, Laudanum Opiatum from three to six grains, Syrup of Hyssop six drams, Syrup of Canel an ounce. Mix them. Dose two or three spoonfuls. This is a Catholic mixture for all Pains of the Stomac. The Spirits of Salarmoniac, Anniseeds, Hartshorn, Tincture of Tartar, Carminative Spirit *de tribus*, or, if the Pain be attended by a burning heat, dulcify'd spirit of Nitre, may be conveniently added.

The remaining Specifics are vary'd according to the causes. If Wind be deemed for the cause, Chamomil is a noted Specific, by reason of its Anodyne and Aromatic Vertues. Its Water, its Essence extracted with a Carminative spirit of Wine, its Decoction, its Oyl drunk with Wine, or applied outwardly with Oyl of Nutmegs, are all of excellent use. Next are the Decoctions of Sassafras, Hyssop, Dill, Rosemary and Mullein-Flowers; the Tincture and distilled Oyl of Orange or Citron Peel, spirit and distilled Oyl of Anniseeds, Spirit of Salarmoniac, Elixir of Mint, *&c.* If it be attended by a notable heat, to these Aromatic Ingredients we may add Acids, as the Juices and Syrups of Quinces, Citrons and Pomegranats; Spirit of Nitre dulcified with a triple quantity of the Spirit of Anniseeds.

If the Anxiety or Pain proceed from Acid sharp Humors, or green rusty Choler, Absorbent Powders are proper; as, Take of Prepared Red Coral, Cinnabar of Antimony, Chalybeat Diaphoretic Antimony, of each eight grains; Laudanum Opiatum a grain, distilled Oyl of Cloves one drop; make a Powder to be exhibited in Chamomil-water, mix'd with Essence of Castor.

If it arise from a viscous Mucilage, Cream of Tartar and Gum Ammoniac are proper Ingredients. If it be caus'd by sublimate Mercury, let Milk mixed with Oyl of Sweet Almonds, or Oyl of Tartar, *per deliquium*, be exhibited: Let Prepared Chrystal, *Venice* Treacle and Fresh Butter, be dissolved in Barley-water, and given to drink; and the Stomac fomented with the Decoction of Henbane Leaves in Red

Wine. Some recommend ſealed Earth, with Syrup of Comfrey for internal uſe. Pins, Pieces of Glaſs, and ſuch like ſharp things ſwallowed, and pricking the Stomac, are removed by drinking Oyl of Sweet Almonds and Broth; or eating a thick Pultiſe of Rice and Milletſeeds.

If the Pain be occaſioned by Worms, give Elixir Proprietatis without the Acid, and ſpirit of Sal Armoniac, or Tartaris'd Eſſence of Wormwood. As for Old Perſons, who are frequently troubled with a Pain of the Stomac, attended by a notable Weakneſs, and propenſity to ſwoon, the following Pills are of wonderful efficacy, *viz.* Take of Ambergriſe two or three grains, Moſch and Oriental Saffron of each a grain or two, Opium four grains. Make Pills.

As touching External Applications, Ointments are compoſed after this manner: *Viz.* Take of the diſtilled Oyl of Chamomil a dram, Oyls of Mace and of Cloves of each fifteen drops, Balſam of *Peru* half a dram. With expreſſed Oyl of Nutmegs, make a Liniment and anoint the Breaſt and Stomac, applying afterwards a hot Brick.

Plaiſters are very uſeful, eſpecially ſuch as are made of Tacamahac, or Gum Caran, with Venice Treacle or Balſam of *Peru*, and diſtilled Oyl of Amber. The Stomac may be likewiſe fomented with the Decoction of Wormwood, Mint, Hyſſop, Marjoram, Chamomil Flowers, Fennel ſeeds and Juniper berries, in Wine, or Vinegar and Water; or a bag quilted with the ſame Ingredients and Spices, and ſprinkled with the Oyls of Amber and Mint, may be applied hot to the Stomac.

Anodyn Cataplaſms are alſo very uſeful, eſpecially in Scorbutic Caſes; as, Take of the leaves of Henbane and Mallows, roaſted under the Aſhes, of each three Ounces; Meal of Barley and Vetches, of each two Ounces; the Mucilages of Tragacanth, of Fleawortſeeds and of Quinces, of each two Ounces. Make a Cataplaſm.

Womens Pains of the Stomac ariſing from the faults of the Matrix, are frequently cur'd by the application of Pomatum and Goats Tallow. As thoſe which proceed from Wind by applying a bag of Bran, toaſted Milletſeeds and common Salt.

The Diſeaſe which we call the Heart-burn, or Heat of the Stomac, is near akin to thoſe laſt deſcrib'd. 'Tis ſeated in the left Orifice of the Stomac, and is only a ſenſe of heat and ſulphureous Fumes paſſing thro' the Gullet, caus'd by the Fermentation of an Acid, with a Fat Oyly Alcali, in the Stomac.

mac. The remote causes are over Acid, or over fat Victuals, Choler abounding in the Stomac, or forc'd thither by anger, or such like occasions, or an Hypochondriac Acidity prevailing in the Stomac.

The burning, or heat, is frequently accompany'd by bitter and musty Belchings; and if it come without a manifest cause, portends a Chronical Distemper. The specifics that compass its Cure, are absorbent Powders, such as Chalk and Cream of Tartar, the Powder of burnt bricks, Bole Armenic, *&c.* Nutmegs are possess'd of a temperate Oyl, fit for moderating the Acrimony of the Humours. The Conserve of the Fruit of the common Briar, Syrup and Conserve of Oak-buds, Juice of House-leek and Nitre dissolv'd in Elder-flower-water, are much approved.

If Evacuation be needful, Tamarinds are most proper. When a stronger Purgation is desir'd, Rhubarb, Pills of Ammoniac and Elixir Proprietatis, are convenient. In an inveterate case, we have recourse to Vomits.

SECT. VIII.

Of the disorders hindring the due Separation of the Chyle from the Excrements in the Guts.

THE Victuals having made a sufficient stay in the Stomac, repair to the Guts, under the form of Chyle; which wants to be further prepar'd by being rid of its Curd, or gross Excrements, before it enters the *Vasa Lactea.* This separation of the good and bad is performed by the Gall, and Pancreatic Juice. The former is an Oyly Sulphureous body, which tinctures the Chyle and predisposes it for being converted into blood. It defends it from Corruption, destroys any remains of Acidity, and ferments with the Pancreatic Juice, which is a temperate Acid. Thus they joyntly attack the Chyle, attenuate its parts, and precipitate the courser in order to Expulsion, while the more refin'd are receiv'd by the Milky Vessels, and conveyed to the Blood.

If this fermentation and separation be irregularly performed, the body is exposed to an infinity of Diseases. In a word, all Chronical Distempers are owing to the lameness of this performance, and that of the first digestion. From these two Juices, *viz.* the Gall, and Pancreatic Juice,

together with the Pituita, compos'd of the Saliva and the remains of the Chyle in the Stomac, *Sylvius* fetch'd the cauſes of a great many Diſeaſes; not only Agues but all Chronical Diſtempers, and Symptoms of the lower Belly. For the leaſt diſorder in that Triumvirate, obſtructs the due purification and conveyance of the Chyle, which cannot but produce many Inconveniencies in the body,

Now each of theſe Juices is accountable for its own faults. If the Gall be too copious, it renders the Chyle too Oyly, and ought to be purg'd out. If too ſharp, or ſaline, it ought to be qualify'd by dulcify'd Acids. If too fat or oyly it ought to be ſharpened with volatil Aromatic Salts. If it be lazy, or do not flow into the Duodenum, it ought to be ſtir'd up, and a paſſage opened to it by Spirituous Volatil Med'cines. As for the Juice of the Sweet-bread, if it be too rank, it ought to be carried off. If too acid or auſtere (its auſterity cauſes Conſtipation of the Belly, Gripings, and Suffocations of the Womb) it ought to be temper'd by Alcali's, both fixed and volatil; as fixed Salts Earths, Chalybeat and Antimonial Medicines, Caſtor, Galangal, Ginger, diſtilled Aromatic Oyls and Spirits, *&c.* If it be too flat or deficient, it ought to be retriev'd by dulcify'd mineral acid Spirits, Juice of Quinces, *&c.* If the Chyle it ſelf be deprav'd in the firſt Digeſtion, its ſofter courſe parts that ſtick to the Guts, *viz.* the *mucus* that defends them from the ſharpneſs of theſe two Juices, is likewiſe diſorder'd, and ought to be put to rights. If it be too copious, purge it off with Coloquintida. If too viſcid, attenuate it with volatil Salts; if deficient, repair it with viſcous Food. But for ſo much as 'tis a difficult task to trace the peculiar faults of every Juice apart, we ſhall touch at ſuch Med'cines as are equally calculated for redreſſing all their diſorders. Thoſe are the temperate ſaline Ingredients, as Arcanum Duplicatum, the Carminative Spirit; Spirit of Nitre ducify'd with a triple quantity of the Spirit of Anniſeeds, together with Opiats: As for Example,

Take of Carduus Benedictus, Endive and Mint Waters, of each an ounce; Sal Armoniac, ſix drams; dulcify'd Spirit of Mint, a ſcruple; prepar'd Crabs Eyes, a dram: Diaphoretic Antimony, a ſcruple; Laudanum Opiatum, three grains; Syrup of Orange peel, half an ounce. Mix and give a ſpoonful now and then.

SECT.

SECT. IX.

Of disorders relating to the Expulsion of the Excrements by Stool.

THE Chyle having drop'd its Excrements in the Guts, pursues its Journey to the Blood. These Excrements ought to be voided in due time. The hindrances of their regular Evacuation, are such as either impair, enlarge, or deprave it.

CHAP. I.

Of the Diseases which impair the Evacuation by Stool.

ARTIC. I.

Of Costiveness.

THE causes of Costiveness respect either the Excrements, or the Guts. Of the former sort are the paucity of Excrements for want of Victuals: Their hardness and dryness occasion'd by neglect of drinking, excessive sleep and rest; swallowing Cherry-stones, or Gooseberry-skins; eating Chesnuts, Eggs boyl'd hard, crust of Bread, and Medlars: Their viscidity and glutinosity, caus'd by viscous Victuals, or an Acid Austere Constitution of Body, and want of Exercise: Their Condensation and Coagulation caus'd by the austere Acidity of the Pancreatic Juice, and defect of the oyly bilious Alcali; all which makes 'em unfit for observing the Peristaltic motion of the Guts, and dispose 'em to stagnat.

The causes relating to the Guts, are Obstructions, or fleshy Excrescences, in the Guts; their Compressions as in Women with child; their Inflammation or Gangrene; their growing together after the Corrosion of a Dysentery; the Paralytic Relaxation of their Fibres, which in Apoplexies eludes Clysters; their Convulsive Contractions, occasion'd by Cholic or Nephritic Pains, which are frequently augmented by strong irritating Purgatives, but removed by smooth Laxatives. Now all these causes hinder the Guts to per-

form their wonted Office, of forwarding the Excrements by their Periſtaltic motion.

Sometimes a Coſtiveneſs is follow'd by a loathing, vomiting, gnawing and ſhooting Pains in the Belly, Uneaſideſs, Watchings, Giddineſs and Head-ach. If it be inveterate it may occaſion a bleeding at Noſe. If the Excrements be lodg'd in the Colon, they create an uneaſineſs, reſembling the ſplenetic Illneſs, which frequently impoſes upon Phyſitians. The diſorders of the Head, and the Hypochondriac Symptoms, are enlarg'd by Coſtiveneſs, which to young Perſons threaten an Epilepſie. If attended by an Ilial Paſſion, Cholic Pains, or a Palſie of the Guts, 'tis very dangerous. To Childbearing Women it renders delivery difficult.

The Cure conſiſts in ſoftening, watering, and attenuating the Excrements; or in removing the cauſes which ſtraiten the Capacity of the Guts, reviving their Senſe, and appeaſing their Irritations.

For the former purpoſes, Oyl of ſweet Almonds, with ſolutive Syrup of Roſes, Salt of the tendrels of Vines mix'd with Spirit of Salt, ſoft potch'd Eggs with Butter, drinking liberally, and eſpecially Raiſins, are of good uſe. Rhubarb and Aloes are not to be us'd, unleſs you mix 'em with Antimonial Ingredients.

Take of the Pulps of Raiſins and Tamarinds, of each an ounce and a half; Cryſtals of Tartar, three drams; Powder of Jalap roots, two drams; Scammony ſulphurated, a ſcruple; laxative Antimony, half a dram. With ſolutive Syrup of Roſes, make an Electuary. The Decoction of Prunes, or of Senna, with Raiſins, is likewiſe very effectual. Clarified Whey, mix'd with ſolutive Syrup of Roſes, or impregnated with Tamarinds by Decoction, is an incomparable Med'cine for opening the Belly. It enjoys a volatil oyly Alcali, which tempers the auſtere acidity of the Juice of the Pancreas (the frequent cauſe of Coſtiveneſs) and moderates the Acrimony of ſcorbutic Salts.

The Decoctions of emollient Herbs in Broth, or that of Figs in Barley-water, are likewiſe uſeful. Some inſtead of Sugar uſe Manna for the Conſerve of Roſes, and Violets, and mix 'em with the Pulp of Raiſins, and Cream of Tartar, with very good ſucceſs.

If the Excrements be very hard, and a glaſſy Pituita beſet the Guts, there's nothing better than Gum Ammoniac. As, take of Mint-water, an ounce; Gum Ammoniac diſſolved in Vinegar, a dram; ſolutive Syrup of Roſes half

an

an ounce; make a Potion for two Doſes. If the Operation be difficult, add Tartar vitriolated, and Scammony ſulphurated.

The Tincture or Eſſential Salt of Tartar is much approv'd. But in caſes of extremity, we muſt have recourſe to Quickſilver; two or three ounces of which may be exhibited in Broth, or Oyl of Sweet Almonds; or it may be infus'd for a Month in Wine, ſhaking the Wine often, of which a ſpoonful or two is a Doſe. Fulminatory Gold reduc'd to Pills with Extract of Hellebor, or Syrup of Roſes, is looked upon by ſome as the laſt Refuge. But it ought not to be dulcify'd or rob'd of its Salt, otherwiſe it becomes Diaphoretic. I chooſe to joyn it with Antimonial Nitre, which provokes the Guts to Expulſion; and find it very uſeful both in this caſe, and that of Childrens Gripings. Strong Purgatives ought to be avoided, by reaſon that they promote the Contraction of the Guts, and conſequently the induration of the Excrements.

As for external Aſſiſtance; Emollient Clyſters of the Decoctions of ſoftning Herbs, mixt with Lenitive Electuaries, Honey, Manna, Yelks of Eggs, and ſoftning Oyls, are very proper. Some chooſe to inject the Decoction of Raiſins in Veal broth. Turpentine Clyſters are very convenien, when Coſtiveneſs is caus'd by Nephritic Pains. Common Oyl, or the Oyls of Linſeed and Rapeſeed are ſometimes more effectual than any other Ingredients. As,

Take of Rape Oyl, in which a dram of Troches Alhandal has been boyl'd, eight ounces; with an ounce of Honey of Roſes, and the yelk of one Egg; make a Clyſter.

If Emollient Clyſters prove ineffectual, and the Excrements be notably hardened, let Sal Gem be added to 'em.

If wind moleſt the Guts, add of the diſtilled Oyls of Cumin and Caraway-ſeeds, of each half a ſcruple. If Sal Gem be inſufficient, add a dram of Coloquintida ty'd in a bag to be boyl'd with the other Ingredients; ſtill obſerving this caution, that when ſuch ſharp Ingredients are added, Oyls, and ſuch like things ought to be omitted, for theſe cramp the others. And in the laſt place, if Coloquintida it ſelf be inſufficient, in the room of it add two, three or four ounces of the infuſion of Crocus Metallorum; but withal, 'tis ſtill to be remembred, that if the Guts be irritated, or moleſted with Contractions, the ſimple ſoftning Clyſters are only proper; and that the uſe of ſuch

ſharp

ſharp Ingredients is to be nicely confin'd to the caſe of the inſenſibility and relaxation of the Guts.

Next to Clyſters are Suppoſitories made of Salt, Honey, Powder of black Hellebor, and a ſmall quantity of Sal Gem. *Sylvius*, and other Authors, are very diffuſe in commending Suppoſitories of Allum, either mix'd in Powder with Tragacanth diſſolv'd in white Lilly-water; or a piece of Rock Allum cut into the form of a Suppoſitory, and anointed with Oyl of Sweet Almonds. But during the uſe of Clyſters and Suppoſitories, 'tis proper to exhibit ſome laxative inwardly, leſt an ineffectual Provocation of the Guts ſhould create an Inflammation. 'Tis likewiſe convenient in the mean while to foment or bathe the Belly, and after bathing, to anoint it; thus,

Take of the Leaves of common Mallows, Marſh-mallows, Plantane and Wormwood, of each a handful; Chamomil and Melilot Flowers, of each half a handful; Seeds of Fenugrec, Linſeeds and Cucumberſeeds, of each a ſcruple. Boyl them in Wine till two parts be conſumed. Foment the Belly with the Decoction.

Take of the Oyls of Sweet Almonds, Violets, Lillies, Roſes, Chamomil, and Spikenard, of each half an ounce; Gooſe fat, an ounce; with a little of the Plaiſter of Bayberries, make a Liniment; with which anoint the Belly after fomentation.

If the motion of the Inteſtines be much impair'd, let the Ointments be ſharpen'd with Bull's Gall, and Sal Gem; or apply a Plaiſter of Bull's Gall, and Oyl of Coloquintida, to the Navel. *Zivet*, eſpecially in Cholic Pains, us'd the ſame way, is a valuable Secret. The Ointment of Soubread ſoften'd with Oyl of Coloquintida, is very uſeful for the ſame purpoſe. As alſo Elaterium, or Scammony, or Aloe mixed with Oyl of Coloquintida. Some mix Gooſe fat with a roaſted Apple, and apply it to the Belly. Others apply Oyl of Poplar with Hiera Picra to the Soles of the Feet. Some chooſe to anoint their Fingers with Rape or Linſeed Oyl, and ſo thruſt 'em into the Fundament; and they ſay 'tis a very effectual Method.

Coughing and Sneezing are recommended by *Platerus*, as fit means for forwarding the Excrements. *Meibomius* gives an inſtance of a Prince that was wont to cauſe his Servant to whip him to Stool.

AR-

ARTIC. II.

Of the Iliac Passion.

THE Iliac Passion is an extreme Costiveness, pain about the Navel, and voiding of the Excrements upwards caus'd by the inverted peristaltic motion of the Guts. If the inversion of the peristaltic motion commence from the Pylorus, it creates Vomiting; if from the Guts, which are a Continuation of the Membrane of the Stomac, it produces the same Symptoms. For the most part it takes its rise from the Ilium, tho' sometimes it begins at the Rectum, or Colon; as appears by their Inflammations, and other observables in dead Bodies.

The causes are Ulcers of the Guts, extreme Costiveness, or acid austere Excrements irritating their Fibres, and causing Obstructions, especially about the Cæcum; a Rupture; The Corrugation of the Guts by a Gangrene, mistaken by some for a twisting of them round one another, a thing inconsistent with their ligation to the Mesentery; the running of one Gut into another, caus'd by Wind distending one beyond its natural Capacity, while the other retains its wonted bulk, apt to be swallowed up by the larger; (this entrance of one Gut into another, may be promoted by unquietness and tossing in the extremity of Pain) Convulsive Contractions of the Guts, Coalition of their Sides, Corrosion of their Valves, and Inflammations caus'd by over Acid Juices, and attended by Fevers, which, if a Gangrene insue, become malignant.

The signs of an approaching Iliac Passion, are extream Costiveness, retraction of the Anus, a loathing, vomiting, and intolerable Pains in the small Guts. If a Hiccough follows it, it threatens death. If the Anus be much drawn back, so that the Clyster-pipe cannot enter, it is a sign that the gross Intestines are affected. If otherwise, the small Guts are only touch'd. If the greatest Pain be seated in the Epigastrium, the Ilium is most oppress'd. A shooting burning Pain in one particular part of the Belly, a Lipyria Feaver, Thirst, and ardor of the Stomac, are signs of an Inflammation. If the Pain be over, and follow'd by cold Sweats, difficult Respitation, Swoonings, and sometimes Convulsions, 'tis a sign of a Gangrene. In fine, the common Symptoms of an Iliac Passion, are, hardness of the Belly, suppression

preſſion of Urine, loathing, vomiting, firſt of the Contents of the Stomac, and next the Excrements; a ſtinking habit of Body, frequent Swoonings, inſufferable griping Pains in the Guts, a prodigious anxiety, and ſometimes vomiting of Clyſters.

Inflammations or Gangrenes are Mortal. If the upper Gut deſcend into the lower, 'tis a fatal Symptom. If the lower aſcend into the higher, 'tis curable. If the Diſeaſe proceed from a Rupture, or harden'd Excrements, 'tis not deſperate. If ſleep ſucceed to the taking of Opiates, 'tis a hopeful Circumſtance. The Hiccough, Deafneſs, Convulſions, or Doatings, are of bad Conſequence. If the Excrements be vomited, and if the Sweat, Breath, Belchings, and Wind voided downwards, ſtink much, 'tis a dangerous caſe.

The cure conſiſts in removing the irritation, and retrieving the natural periſtaltic motion of the Guts. In general, the following Rules will direct us,

1. If the Excrements be harden'd, they muſt be ſoften'd with Clyſters betimes, elſe we labour in vain. 2. All Purgatives are improper, till ſuch time as the Guts and Stomac are appeas'd, and reſtor'd to their natural Motion. 3. Tho' the Symptoms diſappear, we ought not to think our ſelves ſecure, till large quantities of humour be voided downwards, either by a natural or artificial force. 4. The weakneſs and dejection of the Parts, which is caus'd by the ſtink attending this Diſeaſe, ought to be always accounted for by exhibiting Confection Alkermes, Spirit of Treacle Camphoris'd, Cinnamon Water, Ambergriſe, *&c.* 5. In caſe of a Gangrene, Opiates are very noxious; as likewiſe in that of Obſtructions, till ſuch time as the Belly be well opened. When the Diſeaſe proceeds from a violent Irritation, and is attended by a furious everlaſting Vomiting, Opiates may be mix'd with Stomachical Med'cines, while the Perſon is yet ſtrong. 6. Whatever is us'd, whether outwardly, or inwardly, muſt be warm, as well in the time of Recovery, as that of the fit.

Now, as to the particular Caſes. If the ſmall Guts only be inverted, emollient Clyſters, quicken'd, if need be, with Coloquintida, Sal Gem, or Antimonial Infuſions; or thoſe of the Carminative Seeds boyl'd in Childs Urine and Water; or, of the Decoction of Sheeps Guts and Caul; or, in caſe of an Inflammation, thoſe of Nitre and Barley-Water; are proper. But if the motion of the groſs Inteſtines be like-

likewise inverted, all such Clysters promote the Irritation. Wherefore we are obliged in such cases to endeavour the Cure by temperate, softning, laxative, lubrical Potions; as the Decoction of emollient Herbs in broth, mix'd with the Oyl of sweet Almonds; or the Oyl of sweet Almonds new drawn, given to the quantity of three ounces in broth, with Sperma Cæti. Or,

Take of the Decoction of Raisins with Tamarinds, half a pound; Oyl of sweet Almonds, two or three ounces; Syrup of Apples, an ounce and a half.

The Decoction of Rapes, or that of Chamomil Flowers with fresh Butter; or the juice of rotten Apples; is of good use. Some apply the Pulp of Apples with Saffron to the Belly. In a word, the same Method is to be followed in curing this Disease, as we recommended in the last Article.

When all other Med'cines are ineffectual, we have recourse to leaden Bullets and Quicksilver. But in case of an Inflammation, Rupture, Gangrene, or descent of the upper Gut into the lower, the former are very noxious; and even in other Cases they are frequently either insufficient or hurtful. Wherefore Quicksilver claims the Preference. Before we use it, the Body ought to be prepared with lubrical things, such as Oyl of sweet Almonds, or Sperma Cæti. Then exhibit three, four, and sometimes eight ounces of purify'd Quicksilver, together with Oyl of sweet Almonds and Mint-water. If it do's not succeed at first, let it be frequently repeated. And in the mean while inject emollient Clysters, foment the Belly with softening Decoctions, or set the Person into a Bath. If the Mercury after frequent using do's not pass, make the Clysters sharper; anoint the Belly with Ointment of Soubread and Oyl of Coloquintida, and apply the Plaister of Hemloc with Gum Ammoniac, to soften the Excrements. If the Mercury disturb the Mouth, Throat and Gums, Gargle 'em with Honey of Roses, and Syrup of Violets. After the Body's open'd, 'tis likewise proper to exhibit the lunar Bezoar, and diaphoretic Antimony, for carrying off the remains of the Mercury.

Besides the above mention'd Emollient, and temperating Potions, some commend Salt of Wormwood, with Juice of Limons; or the Spirit of Turpentin; or when the Guts are free of Inflammations, Venice Treacle dissolv'd in Wine; for removing the Irritations: Or the following Recipes;

Take

Take of Fennel, Mint, and Carminative Waters, of each an ounce; Spirit of Salarmoniac aniſated, a dram and a half; Eſſence of Opium, a dram; Syrup of Mint, ſix drams; mix and exhibit in the beginning of the Diſeaſe.

Take of prepar'd Amber, Diaphoretic Antimony, Cinnabar of Antimony, of each half a ſcruple; Laudanum Opiatum, two grains; Campyhr, one grain; make a Powder. Mineral Bezoar, and volatil Salt of Hartſhorn are likewiſe proper Ingredients.

If the Diſeaſe be caus'd by an Inflammation, let blood both in the Arm and Leg; let the Perſon abſtain from eating; let Glyſters of Nitre, Milk, and the mucilage of Fleawort-ſeeds be injected; and exhibit a Potion of Mint-water, Spirit of Venice Treacle camphoriz'd, Salt of Wormwood, and Syrup of Buckthorn. Externally, anoint with the Oyntment of Marſhmallows, ſix drams; Oyl of Chamomil, half an ounce; diſtill'd Oyls of Juniper, and of Turpintine, of each a dram and a half, mix'd. After anointing, lay a hot Brick upon the Belly. Sometimes a Gangrene of the Guts cauſes a retraction of the Yard and Teſticles, and it always ends in death. If the Diſeaſe proceed from a Rupture, let ſharp Antimonial Clyſters be injected, and the Inteſtines reinitated in their proper Places. If it proceed from an Ulcer, emollient laxative things are only to be us'd.

As for outward Applications, 'tis uſual to anoint the Belly with diſtill'd Oyl of Chamomil mix'd with the fat of Geeſe or Ducks, for ſoftening the Excrements; or mix'd with Oyntment of Soubread and Oyl of Coloquintida, for provoking to Stool. Cow dung applied to the Belly is ſometimes very effectual for mitigating the Pains. Some recommend the hot Caul of a gelded Lamb, others the blood of Bats, or the caſtcoats of Serpents boyl'd with oyl of Roſes, for external Application. Cataplaſms of ſheeps dung boyl'd with Milk, or rotten Apples with Saffron, or Baths of the Decoction of Chamomil and Melilot-flowers and Juniper-berries, are proper for the ſame purpoſe.

CHAP.

CHAP. II.

Of the Diseases which inlarge the Quantity of Excrements voided by Stool.

ART. I.

Of a Looseness.

WHen the Excrements are more frequently, or copiously vomited, than they ought to be, we call it a Diarrhæa, or Looseness, which varies according to the Color and consistence of the Excrements it discharges. If it be a critical Looseness, caus'd by the Translation of Morbific Matter, or suppression of some wonted Evacuation, change of Season or Diet, *&c.* 'tis of no great importance. That which we have now before us, is a preternatural Looseness, which is sometimes malignant and contagious, attended by cold Sweats, great Anxiety, and propagating it self by the breath; sometimes more benign. Sometimes it comes alone, at other times 'tis the Symptom of some other Diseases of which nature are the Loosenesses which attend the beginning or Increase of Malignant Fevers, or those peculiar to Phthisical consumptive Persons, which we style, Melting, by reason that they drain the nourishing Juice. Sometimes we meet with Periodical Loosenesses, especially among Cacochymical Persons, which return every Quarter of a Year, Month, *&c.*

The Radical subject of a Looseness is the Mass of blood, which despoits it Recrements either in the Form of Serum thro the Glands of the Guts, or in that of Gall or Pancreatic Juice; not that it is actually stuff'd with so much Filth as is evacuated, but it degenerates and corrupts, as the Looseness advances. If the Bilious Particles prevail, and give the Excrements an high Tincture, tis call'd a Bilious Diarrhæa; if the Pancreatic Juice or Serum, tis entitled Serous: If Gross, Viscid, Indigested humors be voided without any notable Tincture, 'tis a Pituitous Looseness.

The cause of Loosenesses is a sharp Volatil Humor, sometimes Acid, sometimes Alcalin; which either irritates the Guts, or ferments with the Natural Acid of the blood, melting

melting down its Mass into Serum, much after the manner of Artificial Purgatives. This Humor is an Enemy to the Acid of the Stomac, and always depresses its Appetite. Nay, oft-times a deprav'd Acid in the Stomac is the occasional cause of a Looseness. Hence, whatever weakens the ferment of the Stomac, promotes the other, and what cures the other fortifies the Stomac. Sometimes the internal Corruption of the Humors, independent of the Stomac, occasions it, which frequently molests such as are of a thick Texture and unfit for a free Transpiration, by reason that the Serum not finding an easie Passage on the surface of the Body, retires to the Intestines to procure a vent. Melting Consumptive and Habitual Loosenesses proceed from the deficiency of the Acid in the Stomac, and Acrimony of the Bile, imparted to the Chyle. All corruptible things, or such as are apt to ferment, do of course dispose the Humors to a Looseness.

The signs are, a Loathing and Dejection of Appetite, immoderate Thirst, Weakness, suppression of Sweat and Urine; a noise and some sort of Griping in the Guts immediately before going to Stool. If it come to a great height, 'tis attended by Anxieties of the Breast and Swoonings; and Cold Sweats, especially upon the Forehead.

If a Looseness accompany Spotted Fevers, or invade the Person in the beginning of an Acute Fever, 'tis very dangerous, by reason that it weakens the Patient, disturbs the Concoction and Separation of the Febrile Matter, and is the Effect of the Feverish Colliquation; and upon that account ought always to be stopp'd, or at least curb'd. If a Looseness be follow'd by Vomiting, 'tis a good sign. In a word, 'tis accounted dangerous, or favourable, according as the Stomac is in good or bad case. If the Excrements be much degenerate from their natural condition, as being very gross white, green or Saffron colour'd; If frothy, gluey, pale, slippery and scanty; especially if they be black, rusty, fat, livid or fœtid; they portend danger. If the Patient begin to void large quantities of Urine, and sweat plentifully, we look upon the Looseness as declining. If a melting Looseness follow Acute Fevers, Consumptions, Phthisics, Hectics, *&c.* 'tis very dangerous.

A Critical Looseness ought not to be stopp'd, unless it exceed bounds. Symptomatical and Epidemical Loosenesses are those which require the greatest attention. The In[illegible] of Cure, with relation to them, are these following;

ing: 1. The sharp ferment ought to be curb'd by moderate and thickening Med'cines. 2. The Blood ought to be purify'd by Sudorifics. 3. The irritating cause temper'd by Absorbents. 4. The Fury of the Spirits, and Sense of Irritation, abated by Opiates. 5. The corrupt Humors gently evacuated. 6. The Stomac ought to be restor'd to its due strength and vigour. In order to obtain these Ends, let's take notice of the following Remarks,

1. 'Tis impossible to cure a Looseness without having regard to the Stomac. Therefore let Wine, and the Preparations of Wormwood, Mint, Quinces, Cinnamon, *&c.* and the external Fomentations and Injunctions recommended above, be us'd in this case. Let all cold drinks be prohibited, and as little of any Liquor allow'd as possibly can be done. 2. All Purgatives are improper against Symptomatical and malignant Loosenesses. They ought rather to be appeas'd than provok'd. 3. In all Malignant, Contagious, Epidemical Loosenesses, Alexipharmical Ingredients, such as Spirit of Venice Treacle, Bezoardic Tincture, with Opium, seal'd Earth, fix'd Antimonial Preparations, *&c.* are much the best. If the Looseness proceed only from an Irritation of the Guts, they are not so needful. 4. 'Tis not proper to purge in the beginning of any Looseness whatsoever. The best way is either to suffer it to go on a little, if it do not exceed measure, or first to check the boyling Humours, and then, if need be, to wash off the Dregs with Rhubarb and Tamarinds, or Gentle Clysters. 5. If a Loathing, Giddiness, Anxiety of the Breast, and disorders of the Stomac accompany a Looseness in the beginning, let a Vomit be exhibited. 6. Astringents, as such, are not properly any part of the Cure of a Looseness. After the Cure of a tedious Looseness is finish'd, they may be useful for strengthning the Fibres of the Guts. But to what purpose should the irritating and floating Humors be bound up? 'Tis better they should take their course than be thrown upon a Nobler Part. 'Tis true, Tormentil, seal'd Earth, Sugar of Lead, and such like things, are very useful; but 'tis not upon the account of their Astringent, but Absorbing and Correcting Vertue. 7. 'Tis the ridiculous Humor of some to avoid Wine: Whereas nothing is more friendly to the Stomac, or more proper against a Looseness.

Of all the Med'cines us'd against Loosenesses, Opium is the Sovereign. 'Tis a powerful Controuler of all Tumultuous Motions. 'Tis exhibited in Vinegar, Or rather, Recent

Diaſcordium may ſupply its room, being given from a dram to two drams. Some extol the uſe of two Eggs boyl'd very hard, and ſprinkled with Roſe-Vinegar and Powder of Mace and Nutmegs. Others recommend a Quince fill'd with Wax and Roaſted; Goats Tallow melted and mixd with Flower, Extract of Tormentil diſſolv'd in Cinnamom or Mint water, together with a grain or two of Laudanum, the Juice of Auſtere Fruits ſuch as Medlars and Quinces mix'd with the Juice of Arſmart: The Rob made from the Juice of unripe ſorbe Apples, the Conſerve of Quinces mixd with diſtill'd Oyl of Cinnamon and Laudanum Opiatum, the Decoction of Maſticwood, (or in the room of it, that of Maſtic it ſelf with Mace and Cinnamon mix'd with Gelley of Hartſhorn, for ordinary drink, or water impregnated with the fumes of Maſtic) The Decoction of Juniper-berries, or that of Hartſhorn and Stag's Pizzle, or the Decoction of Gum Arabic and Sugar in Ale, the Golden Earth found in Gold Mines diſſolv'd with the Spirit of the Vitriol of Steel, Whey or Vinegar impregnated with Steel, Crocus of Steel, dulcify'd Caput Mortuum of Vitriol exhibited in an Acid Vehicle, Coral, Cryſtal mix'd with Hyſteric Laudanum and Chalybeat Bezoar (againſt a Bilious Looſeneſs) Blood Stone, Sugar of Lead; Plantan, Purſlain, Tormentil and Columbin-Waters; and the Juices of Quinces and Pomgranats. Theſe are all ſpecifics in this Diſeaſe.

Take of Mint-water two Ounces, Cinnamom-water two Drams, extract of Tormentil eight grains, Aſtringent Crocus of Steel and Hyſteric Laudanum of each ſix grains, Syrup of Quinces half an Ounce. Mix for one Doſe. Dulcify'd Spirit of Nitre may be added. Or to temper the ſharpneſs of the humors, an Emulſion may be made from ſweet Almonds and white Poppy Seeds with the Decoction of Hartſhorn, and mix d with abſorbent Powders.

Take of Vitriolated Conſerve of Mint, an Ounce and a half; Diaſcordium, half an Ounce; ſeal'd Earth a Dram: Chalybeat Diaphoretic Antimony, and Extract of Tormentil Roots, of each half a dram. With Syrup of Maſterwort make an Electuary. Doſe two Drams twice or thrice a day.

When a Looſeneſs is attended by Gripings, black excrements, thirſt and inappetency, give what follows. Take Conſerve of Mint and Diaſcordium, of each two ounces; Rhubarb

Rhubarb a dram; red Coral, two ſcruples; with Syrup of Coral make an Electuary. Of which let the Patient take a convenient quantity frequantly.

In malignant Epidemical Looſeneſſes, Alexipharmacal ſudorifics ought to be mixed with proper ſpecifics, as Spirit of Venice Treacle with Spirit of Maſtic, ſeal'd Earth, and Volatil Salt of Vipers, *&c.* Or thus,

Take of ſeal'd Earth and Diaphoretic Antimony, of each fifteen grains; Powder of Mace, four grains; Volatil Salt of Vipers, ſix grains. Mix for one Doſe.

Take of Mint and Stordium Waters, of each an ounce and a half; Cinnamon water, three drams; Vinegar of Wine, ſix drams; Venice Treacle, a dram and a half; Mineral Bezoar, half a dram; Syrup of Quinces, three drams. Mix for a Potion.

In the mean while, let the Stomac be fortify'd by the Juice of Quinces, dulcify'd Spirit of Salt, or a draught of Generous Wine. In caſe of a Teneſmus inject Milk-Clyſters frequently. If a Looſeneſs be caus'd by Poyſon, give twelve grains of Emerald with Conſerve of Quinces.

The external Remedies againſt Looſeneſſes are, Venice Treacle, mix'd with Balſam of *Peru* and the diſtilled Oyl of Maſtic, ſprinkled with the diſtilled Oyl of Mace, and applied to the Belly; or the cruſt of Toſted Bread ſoak'd in Vinegar and cover'd with Cloves and Nutmegs in Powder; or a Cataplaſm of yeſt, Powder of Mint Leaves, Zedoary, Cloves, Galangal, Ginger, and Roſe Vinegar, applied to the Navel. Fomentations of the ſame place with Decoctions of Aromatic Ingredients, or Inunctions with diſtilled Aromatic Oyls incorporated with expreſs'd Oyl of Nutmegs (applying after Inunction a hot Brick) are alſo proper.

If there be a neceſſity of cleanſing the Inteſtines, either in the beginning or declenſion of the Diſeaſe, give half a dram of Rhubarb with eight grains of Nutmegs, and three grains of Hyſteric Laudanum; or give the Decoction of Tamarinds. But theſe things are moſt proper in the declination of the Diſeaſe; or if in the beginning, it muſt be, when the humours are hurry'd into the Guts from other Parts, or the firſt Paſſages are very foul, as when a Looſeneſs proceed from Summer Fruits.

If the great Inteſtines are the Seat of the Evil, Clyſters of Milk are proper, as alſo when the Perſon goes frequently to ſtool and voids but little, which is a ſign of the Acrimony

of the humor. In that caſe Emollient Clyſters of Chalybeat Milk, Yelk of Eggs, Turpentin and Honey of Roſes are very uſeful. If the Anus be excoriated, foment with Milk in which Emollient Herbs are boyl'd.

If a Looſeneſs be occaſion'd by over violent Purgation, let Laudanum Opiatum, Wormwood, Rue, Eſſence of Venice Treacle mix'd with Anodyns, and Diaphoretic Powders, ſuch as ſeal'd Earth, Sugar of Lead, Blood ſtone, Diaphoretic Antimony, *&c.* Be exhibited: Let Venice Treacle be applied to the Navel, or the Belly be fomented with Wine, in which Wormwood, Mint and Spices are boyl'd. If the Perſon be grip'd, or Moleſted with a perpetual Itch of going to ſtool, inject a Clyſter of warm Milk in which Venice Treacle is diſſolved.

If a Looſeneſs proceed from an Error in the uſe of External things, as Summer Fruits, *&c.* It ought not to be ſtopped unleſs it overbears, or cauſes an inappetency and weak Concoction, in which caſe we exhibit the abſorbent Powders with Opiates in the ſame method as above.

If a Looſeneſs proceed from the transferring of the morbific matter, to which Catarrhous Perſons are obnoxious in the Night-time, and which the Ancients fancied to flow from the Brain; it is cur'd by averſion and derivation, by Iſſues and Bliſtering Plaiſters.

If a Looſeneſs be caus'd by the ſpontaneous courſe of humors, 'tis cur'd as a common Looſeneſs, or by Chalybeat Med'cines and Bathing. But theſe laſt ſorts of Looſeneſſes require no Cure, unleſs they prove exorbitant.

ARTIC. II.

Of the Diſeaſe call'd Cholera.

A *Cholera* is a Diſeaſe in which the vicious humours are impetuouſly thrown out both upwards and downwards, with a violent Pain in the Stomac and Belly, diſtention of the Hypocondria, Heartburnings, Thirſt, Perplexity of the Breaſt, a ſwift and ſometimes ſmall Pulſe, frequent ſwoonings, unquietneſs, toſſing, a Coldneſs in the outer Parts, cold Sweats eſpecially upon the forehead, proſtration of ſtrength, and at laſt Convulſions and Hiccoughs.

This

This Diſeaſe is call'd a wet Cholera, in oppoſition to that call'd dry, in which nothing but Wind is voided upwards and downwards. It differs from a Diarrhæa only Gradually, the ſymptoms being the ſame, but only more fierce. The Cauſes are the ſame, but more Exalted and Virulent. The Seat of the illneſs is the Duodenum and Pylorus, where the inraged matter irritates the Choleric and Pancreatical Paſſages, thro' which the Blood being over charged with Heterogeneous particles, endeavours to diſcharge 'em.

The occaſional Cauſes are the ſame as thoſe of a Looſeneſs; *viz.* The Corruption and Acrimony of Food in the Stomac, the Aſſumption of ſharp Cauſtic Medicines, ſuch as Antimony, Arſenic, Mercury, *&c.* And the Internal maligniry or depravation of the humors. 'Tis an acute Diſeaſe and quickly finiſhes its courſe. If the Excrements be livid, fetid, black or Corroſive, if it accompany malignant Fevers, eſpecially in the beginning, and if the Stomac be very much diſordered, it proves fatal. It obſerves a Tertian Period in its Exaſperations; and frequently relapſes after an apparent Cure.

As touching the Cure, Alexipharmical Med'cines are abſolutely neceſſary. If it proceed from corruptible and fermenting things taken inwardly, ſuch as Summer Fruits, *&c.* we muſt not be over forward in ſtopping it, eſpecially, if ſuch things be voided as ought to be ſo Far leſs is it allowable to give Purgatives, for they increaſe the Tumult. Opiats indeed ought never to be omitted. If the Patient be extreme weak, give 'em in ſmall Doſes, and frequently; otherwiſe very large Doſes are requir'd. We mix 'em with Bezoars and Diaphoretic Antimony. All cold drink muſt be avoided. Wine is very proper. Watery Diluting Decoctions are likewiſe very neceſſary for eluding the edge of the Salts. In the declination of the Diſeaſe, the Stomac ought to be corroborated with proper Remedies.

The Remedies preſcrib'd in the laſt Article are all convenient here, eſpecially the Juice of Mint, Sal Prunel, Tincture of the golden Earth made with Spirit of Salt, (a notable Aſtringent) prepar'd Cryſtal, Emerald Chalybeats, *&c.* If the Diſeaſe be caus'd by Poyſon, give Oyl of ſweet Almonds, Milk, freſh Butter, and abſorbent Powders, eſpecially prepar'd Chryſtal, and ſeal'd Earth: If it proceed from the abuſe of Summer Fruits, beſides gentle diſcuſſives and cleanſers, the fix'd Salts and Earths, mix'd with Opiates, are proper. If it ariſe from a malign ferment, the Juices and

Syrups of Pomgranates, red Corants, and Barberries; Syrup of Coral, Spirit of Vitriol of Steel, ſeal'd Earth mix'd with Spirit of Vitriol; Solar, Jovial, and Martial Bezoar, Bezoardic Tincture, and ſuch like; are convenient.

Opium, Diaſcordium, Conſerve of Mint, Spirit and Extract of Venice Treacle, and eſpecially Camphyr, are the moſt noted general Specifics againſt a Cholera. The Forms of Recipe's are the ſame as above. As,

Take of the Conſerve of Mint, a dram; ſeal'd Earth, prepar'd red Roral, and prepar'd Chryſtal, of each half a dram; Laudanum Opiatum, two grains. With *Quercetanus's* Syrup of Coral, make an Electuary.

Take of Purſlain Water, three ounces; Cinnamon Water, half an ounce; Spirit of Venice Treacle, and Diaſcordium, of each two drams; Confection Alkermes, one dram; unburnt Hartſhorn, half a dram; Syrup of Coral ſix drams. Make a Potion to be given by ſpoonfuls.

The external Remedies mentioned in the laſt Article, are proper in this. Spirit of Wine camphoris'd, mix'd with Venice Treacle, is a noble Epithema, for the Stomac, if apply'd hot with ſeveral folds of linen.

If a *Cholera* proceed from an Error in Diet, it ſometimes happens, but very rarely, that a gentle cleanſing Med'cine would not be amiſs; ſuch as are Whey alter'd with ſolutive Syrup of Roſes, or Pulp of Tamarinds, gentle infuſions of Rhubarb, *&c.* But Milk Clyſters, with Venice Treacle, or Diaſcordium diſſolv'd in 'em, are always uſeful.

If a *Cholera* be caus'd by the violence of purging Medicines, Laudanum Opiatum, or Treacle, or Confection Alkermes diſſolv'd in warm Wine, is a Sovereign Remedy. Eſſence of Venice Treacle mix'd with that of Opium, and given to forty drops twice or thrice a day, is very ſucceſsful againſt a *Cholera* caus'd by Emetics.

ARTIC. III.

Of a Lienteria.

A *Lienteria* is a Looſeneſs, by which the Meat is ſent out before it be alter'd. The cauſes are an Ulcer in the Stomac, or a ſharp ſcorbutic Salt convey'd thither with the Saliva, and by the Glandules of its Membranes, or corrupted

ed Victuals, irritating the Stomac to an early contraction and evacuation of what it contains: The Laxity of the Pylorus, occasion'd by much drinking; and the deficiency, lazyness, and depravation of the Stomachical ferment leaving the Meat undigested.

The use of signs is to distinguish the causes. If the Stomac be irritated, there's a gnawing heat in the Stomac, accompany'd by Vomiting. If the ferment be weak, the Appetite is dejected, the Breath fetid, and the Cavity of the Stomac and Guts molested with Wind and Noise. A Chronical *Lienteria* exhausts the strength, and tends to a Consumption. If it follow other heavy Distempers, or accompany a Scurvy, or seize Women with Child, 'tis very dangerous.

The indications of Cure are to corroborate the Stomac and Pylorus, by Med'cines prescrib'd in the first Section of this Book; and mitigate the irritating Acrimony of Humors, by such Remedies as are us'd against a *Cholera*, Looseness, *&c.* Gentle Vomits are proper, if the Stomac be stuff'd with pituitous Excrements. But such as are fat and oily ought to be avoided, for they relaxate the Fibres of the Stomac. If Vomiting be not convenient, gentle astringent Purgatives are allowable, such as Rhubarb, or the Pills of Aloe; or those of Mastic. But by all means, let strong Purges be prohibited. If there be any suspicion of Poyson, or if the *Lienteria* proceed from Summer Fruits, and such corruptible things, let Alexipharmacal Med'cines be exhibited.

As for corroborating Med'cines, see the Chapter of Vomiting, and that of a Looseness. The Antiscorbutic Tincture of Coral, Allum us'd as above, and Eggs boyl'd hard, with Nutmegs and Rose Vinegar, Spirit of Salt, *&c.* are of noted vertue for that purpose. The irritation of the Stomac is cur'd by Opiates mix'd with Spices, and absorbent Powders, as in a Looseness.

Externally we apply as above directed, in the Chapters of Inappetency, Vomiting, *&c.*

ART. IV.

Of the Looſeneſs, call'd Cæliaca.

A *Cæliaca* is a Looſeneſs, by which the Chyle is voided together with the Excrements. The Stomac is not faulty, Chylification being duly perform'd there. But the blame muſt either be caſt on the Bile that is ſtopp'd in its paſſage to the Guts, or degenerate from its ſaline Acrimony, and ſo unfit for ſeparating the Chyle; or on the milky Veſſels, thro' which the Chyle ought to paſs, as having their Orifices cover'd with ſlime, or ſhut by the Contraction and Corroſion of the Inteſtines by Looſeneſſes, *&c.* Sometimes the obſtruction of the Glandules of the Meſentery, will alſo cauſe a *Cæliaca.*

If the Bile be defective, the Excrements are white, pale, and parti-colour'd, without any ſign of Separation. If the obſtruction of the milky Veſſels cauſe the Diſeaſe, the Excrements are yellow; and the Chyle tho' voided at the ſame time, is but looſely mix'd with 'em, as having been ſeparated in the Guts, but diſappointed of its paſſage.

If the Bile be lazy, or its paſſage ſtopp'd, we uſe the Medicines preſcribed for the Jaundice. If the milky Veſſels are block'd up, we endeavour to remove the ſlime that beſets 'em by attenuating, opening Ingredients. Aſtringents are not proper. Mint, Wormwood, the opening Roots, Rhubarb, Fennel, Aniſeeds, Gum Ammoniac diſtill'd with Verdigreſe, Sulphur, Oxymel, *&c.* are fit for opening the Obſtructions. After which the Tincture of Tartar, or the Tincture of the droſs of *Regulus Antimonii*, or Chalybeat Tinctures, mix'd with the Spirit of Salarmoniac, or that of Urine, or that *de tribus*, are very convenient.

CHAP.

CHAP. III.

Of Depravations relating to the Expulsion of Excrements by Stool.

ART. I.

Of a Dysentery, Tenesmus, Hepatic Flux, and Itching of of the Anus.

A *Dysentery* properly so call'd, is a voiding of Blood and purulent Matter, with Throws, and Gripings. In which sense 'tis distinguinsh'd from the painless evacuation of thin, watery Blood from the internal Hemorroid Veins, call'd by the Ancients, the Hepatic Flux; and likewise from the natural discharge of Blood, independent of the Guts, caus'd by its redundancy in the Body, as after Amputations, suppression of the Terms, *&c.* or by its Acrimony opening the Vessels, or the obstruction of the Bowels hindring its Circulation.

The cause is some sharp Acid, that irritates the Guts, provokes 'em to Contractions, assembles the Blood by vertue of its Provocation, and corrodes the Orifices of the Blood Vessels. This may proceed from the Corruption of Matter in the Guts; Summer Fruits, Sugar, Honey, new Wine, which become Acid, and ferment with the Bile; Mercury, Coloquintida, Antimony, Lead, the coarse Powder of an Adamant, Worms, *&c.* which vellicate the Guts, and amass sharp humours in 'em. If the Acidity and sharpness be owing to these causes, the Dysentery is benign and free of Contagion. But the cause of an epidemical malignant contagious looseness, is a corrupt, volatil acid, not lodg'd in the Guts, but immediately reigning in the Blood, perverting its texture, opening the Vessels inserted into the Guts; and provoking 'em to convulsive Contractions; from whence insue a malignant Fever, Gripings and Bloody Stools. So that tho' previous Excoriations may take place in benign Dysenteries, there is no occasion for 'em in the contagious malignant sort. It being a sufficient cause of Bloody Stools, that the caustic ferment is a mortal Enemy to the Guts, like to that of Antimony, or Arsenic, that perpetually thwarts

thwarts and provokes 'em to Convulsions. Upon which they squeeze out their Blood together with their nutritious Juice, that they are not then in a capacity to receive; and which is by some taken for the Mucus of the Guts, whereas the large Quantities that are voided do sufficiently evince the contrary.

The signs are these. The sick Person is seiz'd with unsufferable griping Pains in the Guts, follow'd by frequent Stools, at first of whitish matter, afterwards of Blood and slime mix'd together. When he goes to stool, he is grievously tortur'd, and the Guts and Bowels seem to descend. If the Dysentery be malignant, 'tis wonderfully contagious; propagating it self not only by the Breath, but by using the same Clyster-pipe. A malignant Fever, and all its dismal Symptoms accompany it. If in the progress of this Disease, pure Blood be voided, 'tis a sign of the corrosion or opening of some large Vessel in the Guts or Mesentery. If a Dysentery be unseasonably stopp'd, the Guts are inflam'd, and gangren'd; the Throat beset with Wheals and Pimples; the Intestinum Rectum sometimes molested with a Tenesmus and downfalling, the Appetite dejected; upon which insue Nauseating, Vomiting, the Hiccough, Watchings, and at last fatal Convulsions.

If the great Guts are affected, the Pain is heavy and obscure, seated towards the sides of the Belly, and quickly follow'd by Stools; the Excrements with the Slime and Blood, are but indifferently mix'd, and the Stomac less disordered, than when the small Guts are the seat of the Evil; for then there is a notable propension to Vomit, the pain is more pricking and shooting, placed above and below the Navel, and not so quickly follow'd by Evacuations; and the Matter when evacuated, is exactly mix'd, without any signs of distinction.

There are three degrees observable in a Dysentery. The Symptoms of the first, are bloody and slimy Stools. In the second, the slime gives some signs of an Excoriation; and in the third, of Exulceration. When the Guts are excoriated, ; 'tis either the Crust that covers 'em, or part of their thick Tunicle, or at most, the Caruncles or inflam'd Glandules of the Guts, that is voided.

If a Dysentery be attended by a Vomiting, Hiccough and malignant Symptoms; if the Excrements are green, black or fetid; if the Looseness began from a green, black, corrosive Bile; or an acid, salin, tenacious Pituita; in all these cases we

we apprehend danger. Convulsions and Doatings usher in Death. The voiding of Caruncles is a fatal sign. The Indolency of the Guts signifies a Gangrene. If the Anus be so contracted that nothing can enter, it bespeaks a fatal tumor in the Intestinum Rectum; if it hang out and open, so that Clysters are not retain'd, 'tis Paralytic. A Fever succeeding to a Dysentery, is a sign of the Inflammation or Corruption of the Intestines. A Dysentery is frequently fatal to Women with Child, unless it be very benign, and not long before the time of delivery. If a bitter taste in the Mouth, and bilious Vomits happen in the beginning; if a Lienteria, Hiccough, wheals in the Throat, or spots in the Face, happen after it has continu'd some time; and if the Intestines are ulcerated, Death is at hand. If the Person belch or fart, 'tis a good sign. If the great Guts are the proper seat of the Evil, there's less danger. Splenetic and gouty People are sometimes benefitted by a Dysentery.

Now in order to form a distinct Idea of the Cure, let us first give ear to the following Cautions;

1. That by all means we ought to distinguish malignant Dysenteries from such as are benign; and those from an internal cause, from others externally occasion'd.

2. Notwithstanding the Clamors of some Authors, Narcotics are very proper, especially in the beginning; but they ought to be mix'd with convenient Specifics, and given in very large Doses; for Persons under this Disease can bear Opium wonderfully.

3. In malignant Dysenteries laxative Med'cines are very nocive; but in benign ones they're approv'd, in the beginning, if the Constitution of the Person be Cacochymical, or if the Dysentery proceed from Summer Fruits. Rhubarb and Whey are fittest for this purpose, but Narcotics ought to be mix'd with 'em; and likewise exhibited by themselves, both the preceeding and following Nights.

4. Vomits are very dangerous; yet if the Chyle be corrupted, and the Stomac much oppress'd, if the Person vomit easily, and have sufficient strength to undergo the Tryal, they may be ventur'd on. But withal, in a malignant Dysentery they are absolutely noxious, unless an over-violent Purge or Poyson have occasion'd it.

5. Sudorifics are always proper in Epidemical Dysenteries, and ought not to be omitted. They are much prefer-

preferable to Purgatives, or any other Med'cines whatſoever.

6. Aſtringents are very offenſive at firſt. After the uſe of gentle abſtergent Laxatives in benign, and that of Allexipharmacal Sudorifics in malignant Dyſenteries, they may be given in the declenſion of the Diſeaſe, but not before.

7. Blood-letting is to no purpoſe in moſt caſes. Nay, even in the caſe of a ſuppreſſion of the Terms, it ought to be cautiouſly attempted, if the Dyſentery be malignant.

8. All Clyſters whatſoever, tho' never ſo ſoftening, irritate the Guts in ſome meaſure, and promote a Teneſmus; upon which account they ought to be very cautiouſly and ſparingly us'd. They are moſt proper in the declination of the Diſeaſe, when the great Inteſtines are affected, or ſtuff'd with ſharp Humors, and when the Dyſentery is benign.

9. A peculiar regard muſt be always had to the Stomat, whoſe good or bad Condition alone ſtamps a hopeful or deſperate Character on a Dyſentery. Warm Wine moderately us'd, is proper for this purpoſe.

10. The Feet, and external parts ought to be kept warm; for the leaſt Cold, or the drinking of any cold Liquor, revives, and exaſperates the Diſeaſe.

11. There's nothing ſo conducive as Reſt and Quiet; they ought not to ſtir from their Beds, nor move when they are in 'em.

12. Venery is often-times a Sovereign Cure for a Dyſentery.

From what is premis'd, we may infer the Indications for Cure, *viz.* To put a ſtop to the irritation of the Inteſtines, and repair the loſs they've ſuſtain'd; to purifie the Blood, and ſeparate the preternatural ferment.

As for the particular Med'cines anſwering theſe ends, we ſhall firſt run over the Specifics peculiar to this Diſeaſe. In which Claſs the Pizzle of a Whale leads the Van; next is a Staggs Pizzle. They are never pounded, but only ſhav'd.

They may be mix'd either in Powder or Decoction with other Specific and common Ingredients, of which more anon.

The next Specific is Hartſhorn; its Decoction with Burnet is commended by *Riverius*, for ordinary drinking. Its Gelly may be miu'd with the Gelly of Staggs Pizzle, and diſſolv'd in any Liquor. Or thus; Take

Take of the Decoction of the shavings of a Stag's Pizzle, a Pound; Gelly of Hartshorn, six drams; Cinnamon-water, six drams; Syrup of Comfrey an Ounce. Make a Julep.

Next in order are the shavings of the Skull of a Man that dies a violent death, given to a dram; the Moss of the Skull, given to a scruple; the Powder of a Sea horse Tooth, or Unicorn's horn, given to a dram; Oak Berries; Misselto of the Oak: The Powder prepar'd from Elder-berries, call'd, *Tragea Granorum Actes*, baken up anew with Hairs-blood, and Stag's Pizzle, and the fresh Juice of the berries; the blood of a Hair kill'd by Dogs, given in Powder to a dram, or by way of Infusion; a Clout soak'd in it, being infus'd in Ale or ordinary drink: the Blood of a Lamb kill'd after frighting, us'd after the same method; the dry'd Livers of Serpents and Vipers given to a Scruple; Crystal, the Livers of green Frogs, an Apple excavated and filled with Wax and Gum Arabic, and so Roasted; or rather a Quince with the same Ingredients Roasted; the dung of a Dog fed with Bones given to a dram in steeled Goats Milk, the Powder of Horse-hoof given to a dram, *Satyrium* Roots by way of Infusion, the Decoction or Powder of Cork, Wallnut-Catkins given to a dram in Powder, Tormentil, Rob of Sorbe Apples, Mineral Unicorn, dulcify'd Earth of Vitriol taken from the Vitriol of Steel, Sulphur and its Flowers, Ashwood given to a dram in warm Wine; and Allum, of which four or five Grains are given with Cinnamon very successfully.

Thus far the most noted Specifics. The Common ingredients which we usually joyn to them are the Astringent, Styptic, absorbent and fat Oily Med'cines, recommended against Vomiting, Loosenesses, and the *Cholera*.

Goats Milk in the beginning of the Disease is a good Abstergent, and towards the end, Cows Milk Consolidats and Heals. Chalybeat Milk, with Comfrey and Tormentil Roots, or the shavings of Stag's Pizzle, or Rice, or Yelks of Eggs and Juice of Ivy, boyl'd in it, is of excellent use. The Essence and Syrup of Comfrey, the Extract of Venice Treacle, or that of Tormentil given with Laudanum Opiatum at night in Pills; the Spirit of Venice Treacle Camphoris'd; The Tincture of Coral prepar'd with Spirit of Sassafras; The Tincture of the Sulphur of Vitriol; The Styptic Liquor prepar'd from Seal'd Earth and Spirit of Nitre, call'd Liquor Aureus; the Tincture of Blood-stone; Myrrh and its Essence; Amber and its Troches; Sugar of Lead (a noted

noted Specific) the Tincture Extracted from the Earth of Gold Mines by Spirit of Salt; these, I say, are all common ingredients. A few Receipts shall serve for Examples.

In a benign Dysentery, if it be convenient either in the beginning or declension to Purge, of which we must be very cautious; let Laudanum Opiatum be exhibited over night; then in the morning take of Diascordium a dram; Rhubarb, two scruples; Laudanum Opiatum, two grains; with Syrup of Quinces make a Bolus, to be reiterated. Or,

Take of Plantan Water, an Ounce; Powder of Rhubarb, a Dram; Laudanum Opiatum, a grain; with Syrup of Quinces make a Potion.

In a malignant Dysentery let Laxatives be omitted, and prescribe thus. Take of Hartshorn prepar'd without fire, a scruple; Diaphoretic Antimony, half a scruple; Volatil Salt of Vipers, five grains; Laudanum Opiotum, one grain. Mix.

Take of Mint Water, an ounce; Spirit of Venice Treacle Camphoris'd, two drams; Diaphoretic Antimony, a scruple; Human Bones calcin'd, half a scruple; Extract of Venice Treacle, five grains; Syrup of Carduus Benedictus, half an Ounce. Make a Potion for one Dose.

In fine, the common Prescriptions against all sorts of Dysenteries are such as these following.

Take of the shavings of a Stag's Pizzle, half an ounce; Comfrey Roots, Tragacanth and Nutmegs, of each three drams; Seal'd Earth, Bole Armenic, Burnt Hartshorn and Zedoary, of each a dram and an half. Make a Powder. You may add Laudanum Opiatum, and Oyl of Cinnamon.

Take of the Extract of Tormentil, twenty four grains; Vipers Livers, prepar'd Crabs Eyes, of each a scruple; Hysteric Laudanum, nine grains; distill'd Oyl of Cinamon, two drops. Mix for two Doses. You may add Troches of Amber and prepar'd Crystal.

Take of Venice Treacle, a dram; prepar'd Blood-stone, a scruple; dead Men's Bones calcin'd, fifteen grains; Sugar of Lead, six grains. Make a Bolus.

Take of Diascordium, an ounce and a half; the shavings of a Whales Pizzle, three drams; Troches of Amber, a dram and a half; Flowers of Sulphur, a dram. With Juice of Quinces, make an Electuary. Of which take a convenient quantity at Morning, Noon and Evening.

Take

Take of crude Allum, half a dram; Cinnamon, an ounce and a half. Make a Powder. Dose a scruple to be taken in red Wine.

Take of Plantan Water, three ounces; Cinnamon Water, six drams; Vinegar of Roses, half an Ounce; Diascordium, two drams; Troches of Amber, or those of Seal'd Earth, half a dram; prepar'd Crabs Eyes two scruples; Diaphoretic Antimony, a scruple; Syrup of Myrtleberries, or of Quinces, an ounce: Mix. Sugar of Lead, dulcify'd Earth of Vitriol, Extract of Tormentil and shavings of a dead Man's Skull, may be added or mutually shifted by turns.

After the Symptoms are mitigated by the use of the foregoing Prescriptions, it will not be improper to exhibit some healing things calculated for the Corrosion or Ulceration of the Intestines. Such are Balsam of Sulphur prepared with Oyl of Amber or Annis, or of Juniper-berries, or of Turpentin; Balsam of *Peru* given to half a Scruple with Sugar, or with the Yelk of an Egg. To which we may add the Vulnerary Decoctions. As,

Take of the Leaves of Ground-Ivy, Plantan and Tormentil, of each a handful; Pomgranat Flowers three little handfuls; shavings of a Whale's Pizzle three Ounces. Boyl 'em in Black-Smiths-water. To two pounds of the strained Liquor add Syrup of Coral, and that of Comfrey, of each three ounces. Mix and exhibit a large draught twice or thrice a day, with fifteen Drops of the Balsam of Sulphur.

As for Clysters, we ought to be very cautious of using 'em. Anodyn Clysters for allaying the Pain, and tempering the sharp humours, are made of Chalybeat Milk, with Emollient Ingredients boyl'd in it, and mix'd with Laudanum Opiatum, Turpentin, Venice Treacle, Goats Tallow and yelks of Eggs. Pouders are not convenient, for they stick to the Guts, and provoke 'em. Vulnerary healing Clysters are prepar'd from Vulnerary Decoctions, or the Decoction or Juice of River Crayfish mix'd with Balsam of *Peru*, Goats Tallow and Oyl of Linseed.

Externally apply a Plaister of Venice Treacle to the Belly; and take of expres'd Oyl of Nutmegs half an ounce, Balsam of Sulphur prepared with Oyl of *Anis* two Drams, Balsam of *Peru* a Dram. Make a Liniment, and anoint the Belly.

Take

Take of Oak-leaves and Bran, of each three handfuls, Flowers of Chamomil and of Mullein of each two handfuls. Make two quilted Bags to be dipped in warm Vinegar; one large and round to be applied to the Navel, the other long and ſmall for the Breech.

Some reap benefit by ſitting upon the *Caput Mortuum* of Vitriol when they go to ſtool, others by applying a Cataplaſm of Arſemart Leaves, bruis'd and beaten up with Chalybeat Wine: others by receiving the ſmoak of burnt Hartshorn, or Vinegar, or Ginger, thrown upon burning Coals juſt under the breech, when they go to ſtool.

A Teneſmus is a retainer to Dyſenteries, being a perpetual but vain deſire of going to ſtool. The immediate cauſe is the irritation of the Inteſtinum Rectum, eſpecially that part of it that is ſurrounded with the Sphincter. This irritation may proceed by conſent or ſympathy from Nephritic Pains, a ſtone in the Bladder, or Diſtention of the Womb; or Eſſentially from a tenacious Corroſive Acid Humour thrown upon that Gut, either by a preceeding Dyſentery, or ſharp Purgatives; from Inflammations occaſion'd by the ſuppreſſion of the Piles, and the corroſion of the worms call'd Aſcarides.

An Eſſential Teneſmus is more dangerous than a Sympathetical one. If it continue long it degenerats into Ulcers and Fiſtula's of the *Anus*. In Women with Child it frequently cauſes miſcarriage.

As for the cure. Let the Iritation be abated by Opiats. If a Teneſmus proceed from a ſharp tenacious humour, Abſtergent Clyſters and Fomentations are proper. If the Inteſtine be excoriated, temperate ſoft ingredients are required.

Take of Mullein flowers, two handfuls; Seeds of Red Vetches, two ounces; Salt of Tartar, a Dram; boyl 'em in Water. To a pound of the ſtrained Liquor add two ounces of Goats Tallow, and an ounce of Hony of Roſes. Mix for two Clyſters. The Decoction of Worms in Milk is likewiſe very proper. But all Clyſters ought to be injected in ſmall quantities.

Foment the Anus with the Decoction of Mullein flowers in Milk. Or apply a bag quilted with Toad-flax and Mullein Leaves, and the flowers of Mullein and Chamomil, and boyl'd in Chalybeat Milk. Or let the Anus be fumigated with hot Bricks, or Iron, thrown into warm Vinegar; or with the Decoction of Savin in Water and Vinegar; or with

with Myrrh, Frankincense, Roses, *&c.* thrown upon burning Coals.

If the Intestine be ulcerated, inject vulnerary Decoctions with the Oyl of Wax. Or anoint with a Liniment of the Oyl of Roses, and Earthworms mix'd with the Solution of Litharge in Vinegar; or thrust up a suppository of Unguentum Album Camphoratum, Diaphompholygos, and dulcify'd Earth of Vitriol.

Internally the oyl of Mastic with Mint Water, or the red oyl of Vitriol with Brotk, is much approved.

The Hepatic flux is a painless voiding of Watry Blood from the internal Hemorrhoid Veins, which the Antients fancy'd to proceed from the Liver. It either follows the Excoriation caus'd by a preceeding Dysentery, or is occasioned by the ordinary causes of eruption of blood of which elsewhere. Opiats, Astringents, and gentle laxatives, especally Raisins, are the basis of its cure.

Some persons are troubled with an itching of the Anus, If it be caused by the approach of any External sharp thing, let it be fomented with warm Milk and Rose Water. If it tend to an Ulcer apply a Liniment of brimstone, Litharge, and Tragacanth mixed with Vinegar and oyl of Roses. Oftimes Plantan Water and Allum are also very effectual.

ARTIC. II.

Of the Piles.

THe Hemorrhoid Veins are either Internal or External. The Internal proceed from the mesenteric Branch of the *Vena Portæ*; the External from the same Branch of the *Vena Cava* as those of the womb, and so frequently discharge the Blood that was wont to be evacuated by the terms, as in the case of Suppression or Cessation of the terms, or being with Child.

The Blood stagnating in these Hemorrhoid vessels causes often-times a dry inflammation, straitening the Cavity of the Guts, and occasioning a prodigious Pain in voiding the Excrements, sitting, walking, *&c.* It rises up to a great swelling and hangs out of the Gut in various forms, sometimes mistaken for warts, or other occasional tumors; and if it be not discuss'd or open'd, degenerates into a Scirrhus, or an Ulcer.

If the Veſſels give way to the Blood it runs out either by drops from the veins, or with a full current from the Arteries. Sometimes this evacuation is natural and periodical, returning every Month or Week in Men, as the terms in women; ſometimes 'tis Critical infering the ſolution of an Acute diſtemper. Sometime not only Blood, but a watry humour reſembling the Whites in Women, is voided by the ſame veſſels. This evacuation by the Hemorrhoids for the moſt part is involuntary, tho ſome few by cuſtom may have obtain'd a privilege of commanding them when they will.

The cauſe of this Flux or Stagnation of Blood is either internal or external. The former is ſome ſharp ſalin ferment in the Blood, following melancholic, ſcorbutic and Splenetic diſtempers, or occaſion'd by ſuppreſſion of Blood, and ſuch like accidents. This vicious ferment irritates the tender Fibres, and creats and inflammation, pain, and other ſymptoms.

The external cauſes are, Riding, Running, Leaping, or whatever ſtretches thoſe veſſels; any ſudden commotion of the Blood by Anger, Exerciſe, *&c.* Hard Labour of Women with Child, ſuppreſſion of the Terms, and the uſe of Roſinous purgatives, which ſtick to the Guts, and vellicate the Orifices of the Veſſels.

The eſſential Symptom of the Piles, is a green colour of the face. A pain in the Loyns, without a manifeſt cauſe, prognoſticates their approach. They are diſtinguiſh'd from ſcorbutic evacuations of blood, in that they are generally exaſperated by going to ſtool, and the Blood for the moſt part is voided together with the Excrements. The dry Piles are diſtinguiſhed from other Excreſcences, by their being of a different ſubſtance from the Breech, round, black, placed at the extremities of the veins, and being altogether free of Fleſh or Ulceration.

If the Piles be Chronical, or accompany Chronical Diſeaſes, ſuch as the Scurvy, Melancholly, obſtructions of the Bowels, and eſpecially Arthritic Pains, we ought to be cautious of ſtopping 'em, unleſs they exceed bounds; in which caſe they weaken the body, diſpoſing it to a Dropſie or Conſumption, and creating an awkward averſion to Women.

Periodical, or uſual Piles, or ſuch as proceed from ſuppreſſions, ought to be promoted, and opened if they be dry. If the Piles flow too copiouſly, they ought to be

ſtop'd

ſtop'd. If the dry Piles ſeize thoſe who are unacquainted with 'em, or cannot bear the loſs of blood, they ought to be diſcuſs'd. Chalybeat Med'cines are in a manner proper for all theſe purpoſes, by reaſon that the Piles, in what condition ſoever, are for the moſt part either the fore-runners or effects of Hypocondriac Diſeaſes. But to anſwer each Indication apart, we ſhall begin with the firſt.

For opening the Piles, or promoting their Flux, let the part be firſt fomented with emollient Decoctions; then apply the Juice of Fig-leaves bruis'd; or the Juice of Sou-bread mix'd with that of Beets; or a Liniment of Aloes, and the juice of Onyons; or a Suppoſitory of Hiera Pica, with the Powder of Coloquintida, Hony, and Ox Gall; or the Decoction of River Crabs in Oyl (eſpecially in caſe of a notable inflammation, or Heat;) or a Cataplaſm of Pigeons Dung with Staves-acre-ſeeds; or the Juice of Nettles mix'd with boyl'd ſtale Urine ſcumed, and Roſe-water; or (if the *Anus* itch) Juice of Lemons, or Vinegar of Roſes. All theſe ingredients ought to be put into a leaden Mortar, till they're diſcolour'd. But the moſt effectual way of opening dry Piles, is the Application of Leeches. If they creep into the Gut, a Clyſter of Salt-water will fetch 'em out.

Internally the ſame deſign is promoted by reſinous Purgatives, eſpecially Aloe mixed with Myrrh, or Elixir Proprietatis.

If the Piles flow too copiouſly, they ought to be curb'd, which was our ſecond indication. For this purpoſe, toſted Rhubarb, Tamarinds, the Conſerve and Syrup of Oak-buds, the Decoction of Maſtic Wood; Syrup of dry Roſes (a common, but very effectual remedy) the Syrups and juices of Purſlain, and Quinces; juice of ſtinging Nettles, given to two or three ounces; the Decoction of Burnet; dead Mens bones in Powder; Sea-horſe Tooth, and eſpecially the juice and ſyrup of the Ordure of an Aſs, are very proper. Chalybeat Medicines which encounter the Hypocondraic acid, and become as it were vitriolic, are conſequently admirably fitted for this purpoſe. Such are the Tincture of the Sulphur of Vitriol, or that call'd, Tinctura Antiphthiſica, or that of the vitriol of Steel. A dram of the Pills of Bdellium is likewiſe a very proper and effectual remedy. Venice Treacle and Narcotics are univerſally known and us'd.

Take of Plantan and Purſlain-water, of each an ounce and a half; Tincture of the ſulphur of Vitriol, a dram and a half; Laudanum Opiatum, four grains; Syrup of Coral, ſix grains. Make a Potion.

External repellents are Frankincenſe and Myrrh, or Pitch, for Fumigation; the ſpunge call'd Crepitus Lupi; the compound powder of Cork and Mummy; the Powder, of burnt Toads, or of Land Frogs; the fat that drops from a roſted Eel; a Liniment of Soot, yelks of Eggs, and Spiders Webs; Bags quilted with bruis'd Wallnuts and Oaken Leaves, and ſoak'd in Vinegar; all applied to the Fundament. A Girdle of the Leaves of white Hellebor ſew'd in a Clout, with the Powder of Oak bark, is of excellent uſe. Dulcify'd Earth of Vitriol beaten up with the Juice of Plantan; the Ointment of Litharge, and Tutty mix'd with the Aſhes of of Oyſters, are uſeful Liniments. blooding is of no uſe, excepting the caſe of a Suppreſſion.

The third indcation is to diſcuſs the dry Piles, and allay the Pain. The ſpecifics for this purpoſe, are, the infuſion of the Apple of *Jeruſalem* in Oyl of ſweet Almonds, for external application; the Decoction of Mullen, and Elder-flowers in Milk; or Mullen-flowers and Henbane-ſeeds in Water, for Fomentation; or Cataplaſms of their Leaves and Flowers, and the Leaves of Purſlain boyl'd in Milk; Decoctions of the Leaves and Flowers of Toad-flax, and the Flowers of Chamomil in Milk, for Fomentation. Or,

Take of Toad-flax, two handfuls; Henbane-leaves, half a handful; Oyl of Roſes, Oyl of Mullein, of each three ounces; freſh Butter, five ounces, Boyl them, and expreſs the Liquor, to which add a handful of the Leaves of Toad-flax; then expreſs again, and add the yelks of two Eggs. Make a Liniment, and anoint the part; or add to it expreſs'd Oyl of Henbane-ſeeds, and Sugar of Lead, in caſe of an Inflamation.

The Oyl of the Berries of the Herb *Paris* (for Women with Child) or Oyl of Stag-flies, Oyl of Wood-lice, and that of Box-wood, are very much recommended for Inunctions.

Take of the Mucilages of Fleawort-ſeeds, of Quince-ſeeds, and Linſeeds, prepar'd with Roſe-water, of each an ounce; freſh Butter, an ounce; with the yelks of two Eggs, and oyl of Roſes; beat them in a leaden Morter till they become livid, and make a Liniment of excellent uſe againſt In-

Inflammations of the Piles. The oyl of Eggs, Spirit of wine camphoris'd, and Sugar of Lead may be added.

The Balsam of Sulphur prepar'd with expres's'd oyl of Poppy-seeds, or mix'd with Camphyr and Sugar of Lead, or with the oyl of Eggs, and that of Bricks, is of very good use in external applications. Some put Venice Treacle mix'd with Sugar of Lead, and the oyl of the Balsam-Apple, upon a Clout, and thrust it into the Fundament.

Figwort, Orpine, and Pilewort, are three famous Specifics; they are given inwardly by way of infusion, in Ale, or Wine. Their Roots are given also in Powder. Figwort-roots mix'd with fresh Butter, and kept in a Cellar for fifteen days, yield a noble Liniment. The Juice of Pilewort externally applied, is also of excellent use.

Take of the Roots of Figwort and Pilewort, of each half an ounce; with oyl of Mullen, make a Liniment.

If they become Chronical, let an Issue be cut in the Thigh. If they are ulcerated, let fulminatory Gold mix'd with oyl of sweet Almonds be applied.

Upon the whole, 'twill not be improper to take notice of *Wedelius's* Caution, *viz.* That ointments are not always the most convenient forms, by reason that they inlarge the Capacity of the Veins, stop the Transpiration, and augment the Heat.

SECT. X.

Of Worms in the Guts.

HAving discours'd of the expulsion of the Excrements, we come next to consider what preternatural things the Guts may contain, *viz.* Worms. They are either long, or broad, or very small, the last being call'd Ascarides and confin'd to the Intestinum Rectum.

The immediate cause is the seed of Worms convey'd into our bodies. The remote cause is putrified Crudities in the Stomac and Guts, and the deficiency or weakness of the Bile, which is the true scare-crow of Worms.

The Symptoms are an acid smell in the Mouth, stinking Spitle copiously voided, and with some squeamishness; the Excrements in Colour resembling Cows-dung, the yellowness of the white of the Eye, or a Jaundice. Sometimes a biting pain seizes and distends the Belly, especially in a morn-

ning; and the Perſon is troubled with night fears, gnaſhing of Teeth, trembling Convulſions, corroſion of the Gums, Conſumption of the body; the Face is red, and pale by turns, the Appetite voracious and fierce; the ſymptoms are exaſperated by acid bitter victuals; and mitigated by Milk and ſweet things. The perſon is moleſted with a dry Cough, and thirſt when his belly is empty.

Broad Worms have this peculiar ſymptom, that little things like Gourd-ſeeds are interſpers'd with the Excrements. The Aſcarides obſerve the motions of the Moon: By day they are generally quiet; but from ten a clock at night, till morning, they rage. Sometimes they'll corrode the Buttocks and Thighs, and create Ulcers in the Anus and Inteſtinum Rectum.

The broad ſort are expelled with the greateſt difficulty. Worms frequently introduce troubleſome Diſeaſes. If in the beginning of a Diſeaſe they throw themſelves out, 'tis a ſign of great malignity within. In the declenſion, or after concoction, 'tis look'd upon as a good ſign.

In the diſeaſes of Children, Worms are always ſuſpected. All ſorts of Worms ought to be attack'd during the wane of the Moon. Jalap, Rhubarb, and ſweet Mercury are proper Purges. The Specifics are Horſe-Radiſhes, Water-Creſſes, Centory, Wormwood, Peach-flowers, Turnſil, Flowers of St. John's-wort, Savin, Water-Germander, Gentian, Zedoary, Onyons, Garlic, Leeks, Myrrh, Aloes, Spirit of Hartſhorn; the Decoction of Quickſilver in Oyon or Garlick-water; or Quickſilver beat up with Sugar to a Powder, of which half a dram is a Doſe; the oyls of Hazel and Juniper-woods; the acid ſpirits mix'd with fair water, ſuch as that of Vitriol, of Sulphur, *&c.*

While the Worms are lodg'd in the ſmall Guts, inject Clyſters of Milk, and the decoctions of Figs, Raiſins, Liquorice, Hony, *&c.* to invite 'em to come down. If they're arriv'd at the great Inteſtins, kill 'em with Clyſters of the Decoction of Gentian, Wormwood, Graſs-roots, *&c.*

In the mean while apply to the belly, the Gall of a Bull mix'd with Powder of Coloquintida; or a Cataplaſm of Myrrh, Aloe, Vinegar of Roſes, and Bull's-Gall; or Rock oyl, and oyl of Hazel-wood, with Hiera-Picra; or the Ointment of Sowbread with Quickſilver.

The broad Worms are cur'd by the Juice of Horſe-radiſhes, and the Powder of Jalap with Worm-ſeed. The Aſcarides require ſuppoſitories of Dutch Cheeſe, or Lard and Hony; and Clyſters of Coloquintida.

SECT.

SECT. XI.

Of Pains in the Gutt and particularly of the Colic.

WHen the guts are irritated, and ſuffer wringing Convulſions, they are moleſted with a pain call'd Gripings. Sometimes theſe pains reach only the ſmall Inteſtins, and then their ſtation is about the Navel, and Center of the Belly, and they are much more violent than thoſe in the great Guts; If they range not beyond the Duodenum or beginning of the Jejunum, they are felt in the Loyns bending towards the right Hypochondrium, and are oftentimes miſtaken for Nephritic Pains, or thoſe caus'd by the Convulſions of the meſenteric Nerves, or the Tumors and Ulcers of the *Pancreas.*

The Pains in the great Guts are for the moſt part felt in the Colon, eſpecially that part of it towards the Circumference of the belly, upon the left ſide, where 'tis ſtraitned, and incurvated, and conſequently more liable to the ſhocks of Wind, and more apt to ſtop the Circulation of the Excrements, and cauſe their ſwelling up into a Tumor, ſometimes hard, ſometimes ſoft. This pain and Tumor is frequently imputed to the Spleen, whereas the Spleen is incapable of any ſhooting, pricking pain, ſuch as this is, its Membrain being almoſt inſenſible; and beſides, it lies too deep to diſplay its tumor externally. Moreover, this pain is exaſperated by riding immediately after eating; and tho it may be compatible to the Jejunum in the left corner, from whence it runs to the Center of the belly, yet the Colon is its uſual Seat. And ſometimes it veers about to the right ſide of the belly (upon the outermoſt circumference) where the ſame Colon purſues its courſe.

This laſt mention'd pain is a Colic, properly ſo called; but for ſo much as the generality of Writers do comprehend the former under the ſame Title, I ſhall not depart from the uſual meaſures of preſcribing their Cure without Diſtinction, eſpecially conſidering that the ſame is the cauſe of both.

Tho the Pains of the Guts be equally cauſed by Convulſions and Contractions, yet the difference of antecedent Cauſes requires conſideration. Theſe I caſt into two Heads. 1. Some irritating matter provoking the Guts to ſuch Con-

vulſions. 2. The diſorder and uneaſineſs of the Nerves inſerted into the Guts, while they themſelves are faultleſs, as to the matter contain'd in 'em.

If the irritating humor be a viſcous acid mucilage, or hard Excrements faſten'd to the plaits of the Guts, it creates a fix'd boring ſort of pain; its viſcidity confines it to one ſtation, and its acidity acts the boring part. This humor cauſes the common Colic. It ſculks for moſt part in that corner of the Colon towards the left ſide of the belly, where it is contracted and bended downwards. It is incident to Hypocondriac acid conſtitutions, and requires much the ſame ſort of attenuating Med'cines. If this acid acquire any notable ſharpneſs, it ſhoots and pricks as it were with a Needle. If the humor be a viſcous matter hatching an impriſon'd acid, it cauſes Wind, and conſequently diſtending pains; ſuppoſing ſtill that the Inteſtines are moleſted with convulſive contractions which ſtop the Egreſs, and occaſion the rebounding of the Wind. If the humor be altogether viſcid without any acrimony, it cauſes a heavy dull pain. If the irritating cauſe be Worms, or ſome ſharp ſaltiſh acid, it gnaws the Guts. If the Guts are inflam'd, or the Arteries contracted by the Convulſions, they occaſion a beating ſort of pain.

The Diſorders and Convulſions of the Nerves running from the great Meſenteric Plexus, will cauſe tearing, wringing, and contracting pains. They are occaſioned ſometimes accidentally, as by Nephritic Pains, and Child-birth, when the Meſenteric Plexus being irritated by vertue of its near intercourſe with the Nerves of the Kidneys and the Womb, pulls and contracts both the ſtomac and Guts, which it ſupplies with Nerves. At other times they are retainers to ſome fix'd permanent habitual cauſe, that tho it lye latent for ſome time, has always an aſcendant in the body. Theſe are either ſcorbutic, or Hypocondriac, or Hyſteric, or Nephritic, and are owing to the Convulſions of the Meſenteric Plexus, to which the Inteſtins are annex'd, it being gall'd with an offenſive acid; often-times the Nerves of the Throat are likewiſe contracted at the ſame time, occaſioning a difficult reſpiration, and a ſort of Suffocation. Of this nature likewiſe are the griping Pains which follow an irregular Cure of Fevers, as being cauſed by transferring the morbific matter to the Glandules of the Meſentery, and the ſubſequent irritations of its Nerves.

Both

Both these sorts of Pains, *viz.* those caused by a vicious humour in the Intestins, and those by a foreign irritation of their Nerves, are equally attended by the successive returns of Cold and Heat. The cold proceeds from the vellication of the Membrans, when 'tis universal; or the prevalency of the acid Juice of the Pancreas, when it is chiefly felt about the Loyns. The heat from the impetuosity of the Spirits, and the acceleration of the bloods motion; or, when the humor is lodg'd in the Duodenum, from the prevalency of the Bile, or its strugling with the Juice of the Pancreas, and accordingly it is most perceivable in that place. The Belly is frequently costive, by reason of the Contractions of the Guts. If it happen to be soluble, the Colic from the humors in the Guts is mitigated; but that from a mere irritation receives no benefit. Often-times the Nerves of the Stomac are influenced by the mesenteric Plexus, and a vomiting insues.

If the Urine be watry, 'tis a Nephritic Colic; if 'tis highly tinctur'd towards the middle, and colour'd in the surface, and the Anus obstinately shut, 'tis a Scorbutic Cholic; if Respiration be difficult, and the breast perplexed, 'tis Hysteric; if the Convulsion of the Intestines be attended by a pain reaching to the Pubes, and Haunch-bone, the Womb is disordered. If the Cholic be caus'd by the mere irritation of the Nerves, the pain is tearing and not heavy or dull, and the Urine is milky pale and impregnated with a large sediment.

A Colic is distinguished from simple Nephritic pains by these Symptoms. After eating, or the use of Aromatics, 'tis mitigated; the Urine undergoes no sudden changes, tho a Strangury and high Colour may attend the Scorbutic sort; Clysters and evacuations give ease, and the heavy pain does not incessantly molest the Loyns. Now the symptoms of Nephritic pains are directly contrary to these.

The causes of Colics are already hinted at. In general some noxious acid either irritates the Nerves, being seated in the Plexus of the Mesentery, or reigning in the Guts. The Pancreatic Juice is of that nature. The Bile is of a contrary diluting quality, and does not of it self cause Cholic pains, unless it become black, rusty, and green, as in the Bilious Colics. The Remote Causes are whatever promotes Corruption in the stomac or Guts, increases or exalts an acid, or creates an uneasiness to the Guts and Membrans of the body. Of these more under the Head of Iliac Passions.

A Bilious Colic, or that proceeding from humors in the Guts, is of a meek Character, unleſs it be flatulent. Sometimes it Degenerats into Ulcers. If the body be very coſtive and the Anus retracted, 'tis a fatal ſymptom and portends an Iliac. Hoarſeneſs and Vomiting are bad Symptoms. Convulſive Colics, eſpecially the Scorbutic Kind, are very dangerous and obſtinat, and frequently end in Epilepſies, or ſome ſuch diſorder of the Head.

The Cure is endeavour'd both during the Paroxyſm, and after its diſappearance. In the Paroxyſm, the Indications are to allay the Irritation of the Guts, correct and evacuate the peccant Matter if the Colic proceed from vicious Humors, and redreſs the Diſorders of the Nerves if it be Convulſive.

In order to compaſs theſe Ends, 1. The Belly ought to be kept open with Clyſters, eſpecially if the Colic proceed from Vicious Humors in the Guts, or if the great Guts be their Habitation. If the ſmall Guts are affected gentle Laxatives taken by the Mouth, are much preferable. In Convulſive Colics we may inject emollient Anodyn Clyſters of Turpentine, *&c.* But when a Humor, or harden'd Ordure prevails in the great Guts, we may add ſharp Purging Ingredients. As,

Take of the Decoction of Peaſe Eight Ounces, Infuſion of Crocus Metallorum two or three Ounces, Lenitive Electuary or Oyl of Olives an ounce. Mix for a Clyſter, when the great Guts are afflicted by harp Excrements. Some add the Extract of the greater Common Spurge, inſtead of the Antimonial Infuſion. The Smoak of Tobacco is alſo proper for the ſame purpose.

For Convulſive Colics, Take of the Emollent Decoction one Pound, Turpentine diſſolv'd with the Yelk of an Egg two three or four ounces, ſtrain'd Hony ſix or eight Drams. Make a Clyſter. The Oyl of Linſeed and Rape-Oyl are likewiſe very proper. For old Perſons an Anodyn Clyſter may be prepar'd of *Spaniſh* Wine and Oyl of Chamomil.

For a Flatulent Cholic; Take of Bay Leaves, a handful; Chamomil flowers, a handful and a half; Angelica, or Lovage Roots, ſix Drams; The four leſſer hot Seeds, of each two Drams; Boyl them in fair Water. To ten Ounces of the ſtrin'd Liquor add Electuary of Bayberries, ſix Drams; *Venice* Treacle, one or two Drams; Diſtill'd Oyls of Angelica, Caraways, Cumminſeed, and Bayberries, of each

each three or four drops. With the Yelk of one Egg; Make two Clysters, to be injected at two several times, by reason of the wind disturbing the Injection.

In the beginning of the Disease, Gentle Emollient, Anodyn Clysters are not improper in any Colic. As, take of Henbane Leaves, a handful; Boyl them in Milk; To ten Ounces of the Decoction, add an Ounce of the Honey of Roses. Mix for a Clyster.

Afterwards when we have discover'd that vicious matter, or hard Excrements are Lodg'd in the great Guts, we may prescribe Emollient Clysters sharpen'd with Sal Gem, and if these prove ineffectual add sharp Purgatives as above. If the Anus be much retracted, and threaten an Iliac, let Clysters be sparingly us'd, as likewise in all true Convulsive Colics.

2. If the Intestines are much Contracted, either by foreign Convulsions or vicious matter within, proper Purgatives ought to be avoided; for they promote the Contraction and Lock up the Excrements closer. In this case Whey or an Ounce of the Oyl of sweet Almonds, with Spanish Wine and Sperma Cæti, are more effectual than the strongest Purgatives. If the Guts be inflamed, all Laxatives whatsoever are Pernicious. If the Colic proceed from a tenacious viscid humor, and be attended by a heavy boring pain, Purgatives mix'd with attenuating Ingredients are allowable, tho rather after the Fit has made some progress, and the Symptoms are a little abated, than just in the beginning especially if the Pain be very Violent. The safer way is to begin with Emollient Abstergent Prescriptions, such as that of the Oyl of Almonds and Wine and Sperma Cæti; and then after some time prescribe thus.

Take of Mint Water, an ounce and a half; Cinnamon Water, half a dram; Tartar Vitriolated, fifteen Grains; Scammony Sulphurated, and Troches Alhandal, of each two Grains; Solutive Syrup of Roses or of Apples, half an ounce. Make a Potion for a Colic, proceeding from a tenacious acid humor in the Guts. In the Declension of the Fit, 'tis expedient to exhibit sweet Mercury with the Pills of Hiera with Agaric, for dissolving and washing off the remains of the viscous Acid. Or if in the beginning of the Fit it be safe or convenient to Purge, let Laudanum Opiatum be added. As,

Take

Take of Gum Ammoniac dissolv'd in Vinegar, a dram; Diagrydium, six Grains, Laudanum Opiatum, four or five Grains. Mix, *&c.* Fulminatory Gold is likewise a proper ingredient. After the Paroxysm is over Sudorifics and Purgatives mix'd together are not improper.

3. If the Stomac and upper Guts are stuffed with peccant matter, Vomits are very useful. If the pain bear downwards, they are very Pernicious.

4. Narcotics, especially Hysteric Laudanum, are very useful in Convulsive Cholics and such as proceed from a thin fiery humor. They are given in the beginning and during the increase of the fit, while the patient has yet strength sufficient. In case of a viscous acid humour they are not so proper till the Guts be cleans'd by purgatives, unless the violence of Symptoms require 'em. The better way is to mix 'em with the purgatives, and exhibit 'em also after Purgation. Or to give 'em before purging, so as that they have not finish'd their office till the succeeding purge joyn 'em.

5. The Stomac and Feet ought to be well arm'd against Cold; and all cold Liquors avoided; for sometimes they cause a Cholic, and in that case a large draught of Juniper Water is a Sovereign Remedy. 'Tis true, there are some instances of Cholics cured by drinking cold water, which perhaps relaxates the contracted Guts: But 'tis an accidental case, and ought not to be look'd upon as a precedent.

6. When the belly is open'd, if the Symptoms do not disappear, let Aromatic ingredients be us'd, as being admirably fitted for tempering the acid, attenuating the viscid matter, discussing Wind, and fortifying the Nerves against Convulsions. Such are, Male Speedwell, Chamomil, its Decoction in Water, or its Oyl taken inwardly, Clary, Orange-Peel, Zedoary, Garlic, Gentian, Elecampane, Wormwood, the four large hot seeds, Castor, Sulphur, Horse Dung and Stones; Spirit of Sal-armoniac, Spirit of Treacle Camphoris'd, Spirit of Tartar, Spirit of Hartshorn, the Carminative Spirit de tribus, *&c.* Some commend the Decoction of Wormwood, Elecampane Roots, and Orange Peel, with mithridate.

Take of Chamomil and Elder-flowers, Leaves of Mint and dry'd Rue, of each three handfuls; fresh Juniper berries, two ounces and a half; Bay-berries peel'd, six drams; Cummin-seeds, an ounce; Annis and Fennel-seed, of each half an ounce; Aromatic Calamus, an ounce and a half;

The

The yellow part of Orange-Peel, three ounces; Cinamon, six drams; Zedoary, three drams; Pound them well, and sprinkle 'em with six drams of rectified spirit of Wine. Infuse them in a sufficient Quantity of spirit of Wine, not over-rectifi'd, for the space of twelve hours over a gentle heat of Sand; then distill slowly. Dose a spoonful or two.

Take of the waters of Anised, and Chamomil flowers, of each two ounces; Cinnamon Water, an ounce; spirit of Zedoary, half an ounce; dulcified spirit of Nitre, two drams; distill'd oyl of Anis, six drops; Laudanum Opiatum, two Grains; Syrup of Orange Peel, an ounce. Make a Potion to be taken by spoonfuls in Bilious Cholics.

Take of the Waters of Chamomil-flowers, Mint and Peny-Royal, of each an ounce; Essence of Castor, two or three drams; Spirit of Hartshorn succinated, or spirit of Sal-armoniac, a dram and a half; Laudanum Opiatum, three Grains; Syrup of Mugwort, an ounce. Mix for two or three Doses in Convulsive Cholics.

Take of the flowers of Sulphur, two drams; Jaw bone of a Pike, a dram; distill'd Oyls of Caraways, Cummin seed and Fennel seed, of each four drops; Laudanum Opiatum, four Grains. Make a powder for three, four or five doses, in the Cholics that proceed from humors.

In Nephritic Cholics, Pills of Turpentine are very proper. If the Gripings are attended by a burning heat the dulcifi'd Spirit of Nitre; If by a coldness, the fix'd salts, and absorbent Powders; are useful.

Take of Castor, half a scruple; Volatile Salt of Amber, five Grains; Laudanum Opiatum, a Grain or two. Make a Powder for convulsive Cholics. Or,

Take of the Tincture of Tartar, half an ounce; Essence of Gum Ammoniac, three drams; Essence of Myrrh Tartaris'd, a dram and a half. Mix, *&c.* Dose fifty drops. Elixir Proprietatis, Essence of Castor, or that of Opium, may be added by turns. Pills of the Extract of Castor, and that of Venice Treacle mixed with some convenient Oyl, are very proper. The decoction, Essence, Powder and Oyl of Orange Peel (especially in a strangury) and all Preparations from Clary, are of Sovereign use in all Cholics. The flowers of Sulphur are of unknown Virtue, if mix'd with Myrrh, or distill'd Oyls. Spirit of Nitre well rectified with Spirit of Wine distill'd from Aromatic Ingredients, is an incomparable thing in all hot Cholics. 'Tis given with the decoction of Elecampain Roots for a Vehicle. The

Oyl

Oyl or Spirit of Turpentin, digeſted with Juniper Berries and Flowers of St. *John*'s wort (which by the way are poſſeſs'd of a rich Oyl) is given againſt the Colics cauſed by humors in the Guts, to a ſcruple, with wonderful ſucceſs. The Carminative Spirit made of Nitre Tartar and Spirit of Wine, given to half a Dram in ſome warm Vehicle, is likewiſe much applauded. The Powder of Horſes Stones given to a dram in Lilly Convally Water, with a little Saffron, the ſhavings of a Bull's Pizzle given to a ſcruple in *Spaniſh* Wine, the Powder of Soot mix'd with Vinegar, or its Spirit, are all approved Remedies. Sugar of Lead is excellent where acidity prevails; As the Juice of Horſe dung, or that of other Beaſts, mix'd with warm Ale, is inferior to no Medicine in that caſe. After taking any of theſe Medicines the Patient ought to be very quiet, and make account to ſweat.

If a Colic tend to a Palſy of the Guts, let ſharp Clyſters be injected; and Volatil Salts exhibited, ſuch as that of Urine, Spirit of Hartſhorn or of Sal-armoniac, and eſpecially the Volatil Spirit of Tartar, or, which is yet more Volatil, the Spirit diſtill'd from the Dregs of Wine. In a ſcorbutic Colic let Volatil Salts and Antiſcorbutic Ingredients be added. In a Colic caus'd by an external error, Laxatives mixed with Abſorbents are proper. If Cold or Drinking occaſion it, give Pepper and Spirit of Wine.

As for external Applications againſt Colics. Let the Belly and Navel be well fomented with Liniments of expreſs'd Oyls mix'd with thoſe that are diſtilled, and afterwards cover it with a hot Brick. The fat of a wild Cat and Zivet is much approved for this uſe: As alſo Galbanum melted and mix'd with the diſtill'd Oyls of Spike and Amber. Plaiſters made of Tacamahac and Balſam of Peru, or that of Bayberries with that of Tobacco; Cataplaſms of Horſe Dung with Oyl of Rue; And quilted bags of Milletſeeds, or of Anodyn and Aromatic Ingredients; are likewiſe applied to the Belly with good ſucceſs.

Take of the Oyls of Bays, of Dill and of Chamomil, of each half an ounce; Galbanum, a dram; diſtill'd Oyl of Amber, half a dram; diſtill'd Oyls of Caraways, Cummin and Fennel, of each half a ſcruple. Make a Liniment. The Oyl of Orange Peel, the diſtill'd Oyl of Angelica, and the Oyl of Caſtor, or Powder of Caſtor, are alſo proper Ingredients. The Oyl of Soap and white Rock Oyl, are of excellent uſe externally in all Convulſive Colics.

Take

Take of the tops of Henbane, and Elder flowers, of each two handfuls; Chamomil flowers three or four handfuls; fresh Juniper berries, two ounces. Make a quilted bag to be infused in hot Wine, or boyled in Goats Milk, and applied to the Belly, and frequently reiterated, especially in Scorbutic Colics.

Some choose to apply bags of Oats, Juniper berries, and Coriander seeds. Others apply a little Puppy to the Belly.

So much for the cure of a Colic fit. After the fit is over, let Diuretic and Carminative Med'cines be used. The solution of Steel with the Juice of Apples, the Spirit of Sal-armoniac, and, to robust Constitutions, the Solar Liquor of Steel, are then very useful.

SECT. XII.

Of the Vicious Postures of the Guts.

CHAP. I.

Of Ruptures.

THE Caul and Guts are wraped in the Peritonæum. If this Membran be relaxated or broke, they fall out upon the infirm Part, either separately or both together. The Guts which are liable to this Eruption, are the Jejunum and Ileum. The great Guts are secure from that danger, as being more firmly fastned. This Relaxation of the Peritonæum, happens for the most part in one of its two Processes, the one surrounding the Umbilical, the other the Spermatic Vessels. The bursting at the Navel is sometimes caus'd by hard Labour in Child-birth. Vomiting, Jumping, crying aloud, carrying of heavy Burthens, Coughing, Sneezing, violent Purgations, or whatever divides or stretches the Membran of the Peritonæum, are the general causes of all Ruptures.

Children, whose Membrans are tender, and most expos'd to Violence, are very obnoxious to this Disease. Sometimes the Infirmity is Hereditary, or produced by internal causes, but withall very rarely. If the Process of the Peritonæum

ritonæum ſurrounding the Spermatic Veſſels, be dilated, either the Caul or the Guts, or both, fall down either upon the Groyn, or into the Cod. If the Membran be quite broke, they ſtop about the Muſcles of the Groyn. But if it be only dilated, they trace its Progreſs to the Cod. Sometimes but very rarely, this burſting falls out upon the ſides of the Belly, or upon the Loyns, or thro a breach in the Womb: And Surgeons ought to be very cautious that they be not impoſed upon by it, under the appearance of an Ulcer in thoſe unwonted Places. The Stones ſometimes are drawn into the Groyn, and reſemble a Rupture, and are often-times taken either for that, or an Impoſtume.

A Rupture therefore is a ſoft Tumor, ſometimes decreaſing, ſometimes increaſing. If it be recent, it diſappears when the Patient lies on his Back, and returns when he ſtands upright. For the moſt part 'tis Painleſs, and eaſy to put up, unleſs the Gut be inflamed, or moleſted with Wind or hardened Excrements. And beſides, it increaſes, if the Patient cough. By theſe Signs it is diſtinguiſhed from Bubo's, or the Teſticle ſticking in the Paſſage.

If the Gut be irritated either externally by Cold, Bruiſes, *&c.* Or internally by Wind, hard Excrements, *&c.* Iliac or Colic Pains inſue and are very fatal; as likewiſe Inflammations, or Gangrenes, or ſuppurations of the Gut. In adult People, 'tis a difficult matter to cure a Rupture, *&c.* A Hiccough following a painful and ſudden burſting is a fatal ſymptom. If it be caus'd by cold, 'tis very dangerous.

The cure is performed by putting up the Caul or Gut, fortifying it in its proper Station, and healing the Breach, or contracting the Width of the Peritonæum.

Purgatives are pernicious. If the great Guts are moleſted with Wind, or the Belly coſtive, let Clyſters be injected. Flatulency promotes and exaſperates the Diſeaſe, and therefore ought to be particularly ſubdu'd by Carminative and Precipitating Med'cines. In putting up the Gut, we ought to handle it very tenderly, and very ſeldom, for fear of Irritation, and place the Patients Feet higher than his Head. All things uſed either internally or externally, ought to be Lukewarm. Solid Victuals ought to be avoided, and Liquid Food chiefly uſed. If the Gut be hard, let it be fomented with Emollient Decoctions; for the hardneſs proceeds for the moſt part from its Diſtention and Convulſive Poſture, rather than hard Excrements, which are ſeldom found in the ſmall Guts. When the part is handled, let the Surgeons Hands,

Hands, or Fingers be anointed with Oyl of Chamomil, and Oyl of St. *John*'s wort, with a few Drops of some Carminative Oyl.

If it be difficult to put up the Gut, let the following method be observed; Internally, Exhibit the Decoction of the greater four hot Seeds in Wine. Externally, apply a Cataplasm of Sheeps Dung boyl'd in Goats Milk, and Foment with the Decoction, adding to it a little of the Spirit of Wine, in order to discuss the Wind and Hardness, and allay the Pain. Some apply the hot Caul of a gelded Lamb, and with good success. The Hardness, Wind and Pain are likewise mitigated by Fomenting with Decoctions of Emollient and Carminative Ingredients. Or Clysters of the same Ingredients may be injected, that so the great Guts being emptied, any irritating matter in the small ones may have the easier passage. Let Plaisters also be applied to the Loyns to oblige the mesentery to draw back the fallen Gut. As,

Take of Gum Ammoniac, Galbanum and Sagapenum, of each three drams; Turpentin and Virgin Wax, two or six drams; Arsenical Loadstone two drams, and fifteen grains; Roots of Cuckowpint, a dram. Dissolve the Gums in Vinegar, and boyl them to the consistence of a Plaister together with the other Powders. Apply the Plaister to the Loyns. Some commend the fat of a Bear, or of a Hedg-hog, for the same use.

If all these means prove ineffectual, a Surgeon must open the place and put up the Gut, and then heal the wound.

After the Gut is put into its proper station, it will be necessary to continue it there and corroborate the Peritonæum, by Internal and External Means. The former are the Vulnerary Decoctions, especially those of Rupturewort and Thorowax. The Seed of Garden-Cresses is of excellent use given inwardly in Powder with Red Wine, or by way of Decoction, and applied Externally, being beaten up with the Yelk of an Egg, or form'd into a Plaister with Caran and boyled Turpentin. The Oyl of Lizzards is of singular use for External Unction. The salted Skins of Eels, or of Serpents, boyl'd up with Lees to the consistence of a Plaister, or Plaisters made of Pitch, Mastic, Caran, Dragons-blood, Bole-armenic, *&c.* Or of Rosin, Pitch and Powder of Bricks; or Compound Plaisters of *Rulandus*'s Diasulphuris, the Rupture Plaister and Pitch mix'd in equal quantities; are all recommended for outward application. Some anoint the part with Balsam of Sulpher, and the Oyl of

the Yelks of Eggs. But others reject all Oyly Ingredients, as being too Laxative, and order the application of clouts dipp'd into distilled Vinegar, in which Lytharge is dissolv'd, and after that a Plaister of the Gum of Black-Cherry-Tree, dissolv'd in Oyl of St. *John's*-wort, and mix'd with Frankincense and Mastic. During the time of applying these Plaisters, let the Belly be kept open, and a Truss kept constantly about it, and never remov'd but when the Patient lies on his Back.

CHAP. II.

Of the downfalling of the Anus.

THe Intestinum Rectum is sometimes stretched out so far, that the Retracting Muscles are not able draw it in. The Cause is either the too frequent, or violent Expulsion tearing the fibres of the Retracting Muscles, and occasion'd by Irritating Clysters, Suppositories, a Tenesmus, viscid hard Excrements requiring extraordinary force to expel them, the bearing down in Child-birth, a stone in the Bladder provoking the Gut, *&c.* Or, the Relaxation and Weakness of the Retracting Muscle, occasioned by the foregoing causes, or falls upon the *Os sacrum* disturbing its Nerves, or the injury of external cold when the Gut is violently stretched forth.

If this Disease continue long, it degenerates into a troublesome Tumor. If the Anus be inflam'd it may end in a Gangrene; if troubled with a Tenesmus or Bleeding, 'tis very dangerous. If the Muscle be Paralytic, the Cure will prove both difficult and tedious.

For Cure; the Anus must be put up, and fasten'd when 'tis up. If we suspect hard Excrements in the Gut, we ought to foment with, and inject Clysters of, the Decoctions of Melilot, Mullen and Elder Leaves in Milk. If a sharp foraid Slime provoke the Gut, inject the same Decoction with some Astringent Ingredients added. If the Anus be inflam'd, foment with the Decoction of Chamomil, Elder, and St. *Johns-wort* Flowers, red Roses, Wormwood tops and Melilot, in Whey; or in Milk, if the Pain be great; or in red Wine, in case of a hard Swelling.

Then

Then Fumigate the Anus with a mixture of Amber, Mastic, Myrrh, Frankinsence and Jews Pitch; and after Fumigation, anoint with Oyl of Eggs, or the Oyl of Mastic in which Stagflies are boyl'd, applying in the mean while a Plaister of Opopanax and Sagapenum to the *Os sacrum*. Every thing being thus prepar'd, let the Anus be put up with the finger cover'd with a clout dipp'd in red Wine, or anointed with Goat's or Hart's Tallow. After 'tis up, let the Person lie on his Belly with his Legs stretched out. And apply quilted bags of Bran, Mullein flowers and Yarrow leaves boyl'd in Black Smiths Water and Vinegar, to strengthen the Anus. For which end Aromatic Ingredients may likewise be added. If after the return of the Gut to its proper place, there remains an Inflammation or Redness in the Anus, foment it with Plantan Water in which Sugar of Lead is dissolv'd.

SECT. XIII.

Of the Incumbrances of the Chyle, in its Passage from the Guts.

THE Chyle being duly separated and purifi'd in the Guts, ought to enter the Milky Vessels, and proceed thro' the Glandules of the Mesentery to the common Receptacle, where 'tis diluted with the Lymph of the inferior Branches; and from thence continues its progress thro' the Conduit of the Breast, to the Axillary Vein, where it joyns the Lymph of the upper Region.

This natural motion is oftimes anticipated by tenacious humors guarding the entry of the *Vasa Lactea*, or Scars following the Corrosion of a Dysentery, or Looseness; or interrupted by its own viscidity, or slime squeez'd into its Vessels from the Guts and afterwards congeal'd; of which we have a plain Instance in the Case of drinking cold Liquors after a violent hot Exercise; for as much as the heat melts the slime, and the motion drives it into the Vessels, and the sudden arrival of cold Liquor cuts off its retreat, by causing its Coagulation; so that it either stagnates, or proceeds with the Chyle to the Blood, and depraves its Crasis.

This viſcidity or crudity of the Chyle, or of the Humor its Companion, is the true cauſe of all Chronical Diſtempers, falſly imputed by the Ancients to Obſtructions, or contrary Qualities of the Bowels. That there are Obſtructions, I do not deny: Some in the Blood Veſſels, cauſing Inflammations: Others in the Lymphatic (or perhaps thoſe of the Chyle) cauſing the rupture of the Veſſels, and effuſion of the Lymph upon the Cavities of the Body. And others again in the Bowels, appearing in the form of Impoſthumes and Schirrus's. But theſe are rather the effect, than cauſe of Chronical Diſeaſes. That ſtagnation of the Liquors in their reſpective Veſſels, is occaſion'd by their viſcidity. The viſcidity is caus'd by acid Crudities attending the Chyle, and debauching the Blood and Lymph. Moreover, the proneneſs of Impoſthumes to ſuppurate, and that of Schirrus's to become Cancers, are ſolid proofs of their being caus'd by a viſcous acid. And, as to the Antipathy of the Bowels, 'tis inconſiſtent with the Laws of Circulation. The Blood and Spirits are equally the cauſe of heat all over the body, if all the parts be equally diſpos'd for their Reception. 'Tis true indeed, a particular Bowel, or external part may be occaſionally weakened, and ſuffer a Relaxation of its Fibres; or by virtue of Acid pointed Particles darted into its Boſom, like that of a Thorn into the Finger, may be diſturb'd with Heat and Inflammation, while the others retain their cooler Temperature. But it plainly appears, that theſe effects are not owing to any Radical Antipathy in the Qualities of the Bowels, but the occaſional unequal diſtribution of the viſcous acid Particles.

It remains therefore to be concluded upon, that the Acid Crudity of the Chyle, impreſs'd upon it in the firſt Paſſages, is the natural and obvious cauſe of Chronical Diſtempers; and that Obſtructions may be effected by the long duration of theſe Diſtempers, but cannot claim the priviledge of being their Cauſes. This Hypotheſis will be ſet in a clearer light by ſurveying the Symptoms, and the Method of curing theſe Chronical Diſtempers. The former are Acid Belchings, Wind, loſs of Appetite, Gripings, and noiſe in the Guts; occaſional Heat and Inflammations, Looſeneſſes, *&c.* the natural Progeny of an Acid Crudity. And as touching the latter, the whole Circle of Specifics is generally made to center in an aperient Vertue. Now the Preparations of Steel and Lead do juſtly lead the Van

of

of this numberless Catalogue. And how these Astringent Medicines should be intitled to an opening Vertue, all the *Posse* of Writers is at a loss to explain. Whereas 'tis an obvious Solution, that these metallin Particles suck up and incounter the Acid Crudity, and transform it into a vitriolic Concrete, which is afterwards evacuated under the form of black Excrements. So that it opens or unlocks the Passages only indirectly, by subduing the hostil Intruder.

Antiscorbutic volatil saline Medicines and Gums are, likewise us'd. Now they attinuate the viscous Humor, precipitate the rank Acid, fortifie the Stomac (the original source of the Evil) and whet the Bile. And here by the way, 'twill not be improper to take notice that the Essences commonly prepar'd from volatil Antiscorbutic Herbs, as the Essence of Scurvygrass, *&c.* fall short of the original vertue of their Herbs, as containing only the volatil Salt, strip'd of the fix'd Salt, which withal is very useful. Upon which acconnt I prefer the Quintessences made of the Oyl, and both the Spirits, one prepar'd by Fermentation, and the other by Putrefaction; these two being mix'd with the distill'd Oyl by long digestion and frequent Cohobation. And besides, all Antiscorbutic Spirits prepar'd by Fermentation, ought to be frequently cohobated in order to extract the fixed Alcalin Salt. Tartar also is a great Specific in these Cases. But its Cream is too Acid. Let it be mixed with half the quantity of Salt of Tartar, dissolved in warm water, after Fermentation filtrated, and set to evaporate. Thus its Acidity is conquered. Its volatil Spirit, or rather that drawn from the dregs of Wine; or the Carminative Spirit prepared from Nitre, Tartar, and Spirit of Wine; and all volatil Preparations of Tartar are of wonderful efficacy in clearing the first Passages, correcting the digestive ferment, and conquering the Acid of Wine, that we in these Countries are so obnoxious to.

In the Animal Province, Mans Urine given to drink and all urinous Spirits and Salts, especially the Spirit of Sal-armoniac prepar'd with Quick-lime, are noted Antiacids in all Chronical Distempers. The Spirit of Ants, and that of Earth-worms, are famous Anti-scorbutics. Of the Mineral Family, Steel is the Head. It ought not to be much impregnated with an Acid, otherwise it will not dissolve in the Body. The best way of giving

ving it is either in crude Powder, or by way of extract, taken from its Infuſion in the Juice of Apples, Quinces, or of Tamarinds; or a Tincture taken from the ſame with Spirit of Scurvygraſs. The Tincture of Steel, prepar'd with Spirit of Bread, is likewiſe a proper form. Its Crocus is beſt prepar'd by ſprinkling it with Juice of Cichory, and expoſing it to the Sun. Next to Steel is Lead, eſpecially its Sugar, and the Antiphthiſical Tincture, prepar'd from it and vitriol of Steel with Spirit of Wine.

From theſe Premiſes we infer, that the cauſe of all Chronical Diſtempers, is a viſcous acid Crudity, either bred in the Stomac, or hatch'd by the vicious Effervescencies of the Gall, and the Juice of the Pancreas in the Guts. Upon which account all Stomachical, Attenuating, Antiacid Medicines are the true Antidote of theſe Diſeaſes. And whoever attempts to cure 'em, without a ſpecial regard to the Stomac and firſt Paſſages, ſhoots ſhort of his Mark. The forms of Recipe's ſhall be inſerted in the particular Deſcription of the reſpective Diſeaſes.

SECT. XIV.

Of Diſeaſes relating to the Lungs, and Organs of Reſpiration.

THus far we have conſider'd the Chyle in its ſeperate ſtate. It remains now to ſurvey its ſtate of Complication with the Blood. The mix'd Maſs of Blood and Chyle is carried from the Axillary Vein to the deſcending Trunk of the Vena Cava; from thence 'tis convey'd to the right Ventricle of the Heart; and before its entry into the left Ventricle, is thrown into the Lungs by the Vena Arterioſa.

The Lungs are a heap of little Bladders joyn'd by a ſimple Membrane, endow'd with moving Fibres, and require to be dilated before the Blood can have admiſſion. This Dilatation is perform'd by the Air and Muſcles. The Midriff, together with the Subclavian and Intercoſtal Muſcles, inlarge the Capacity of the Breaſt; upon which, there being no *Vacuum*, the Air crouds into the Lungs, and diſtends 'em to fill up the void ſpace. The

Lungs

Lungs being thus distended, the blood empties it self into 'em; and by vertue of the universal Salt of the Air, its Mass is dissolv'd, rarify'd, volatilis'd, and freed of its Steams. This admission of Air, or dilatation of the Lungs, is call'd Inspiration. And the Expulsion of it, or successive compression of the Lungs forwarding the Blood to the left Ventricle of the Breast, is stil'd Expiration; the complex Action bearing the title of Respiration.

CHAP. I.

Of Inspiration abolish'd, or Suffocation.

Suffocation is a denying of admission to the Air. The Cause may relate either to the Passages thro' which the Air is to pass, or to the Lungs that are to receive it, or to the Muscles whose Office 'tis to dilate the Breast.

The Passages are embarassed by external Ligatures, which if they be suddenly put on, extinguish all manner of Sense in an instant; by being fill'd with Water, or drowning; by Tumors and Inflammations in the Neighbourhood of the Wind-pipe; by swallowing bulky things that stick in the Gullet and press the Wind-pipe, or bear down the Epiglottis; by forcing things into the Wind-pipe by laughing, or speaking in the time of eating; by Hairs, *&c.* sticking to the Epiglottis, and disturbing its motion; or by a large Polypus in the Nose, spreading its Branches to the Throat.

After strangling we endeavour to bring the Person to life by Blood-letting, pouring down spirituous Liquors, and rubbing the Joynts. If the Suffocation is caus'd by being under Water, we hang up the Person by the heels, that the Water may run out; then apply a Toast soak'd in Spirit of Wine, and exhibit Sudorifics, or sometimes a gentle Vomit. If any bulky thing stick in the Throat, give 'em a blow on the Back, and exhibit Oyl of sweet Almonds, or Cassia. If it stick in the Wind pipe, Coughing, Sneezing, and Vomiting will bring it up. If a Bone stick in the Gullet, let it be brought up by an Instrument, or apply a suppurating Cataplasm, or exhibit a Vomit. A narrowness of the Passage caus'd by Aqua fortis, is cur'd by the Mucilage of Quinces.

A ſudden Suffocation affecting the Lungs immediately, is caus'd by Narcotic Sulphurous Steams of New Wine or Ale; new Plaiſtering, Coal-Pits, and other Mineral Fumes, which deſtroy the Airy Spirit that ſhould ferment the Blood, and ſo cauſe its Stagnation in the Lungs, and extinguiſh the animal Spirits; producing Apoplexies, Carus's, and many diſmal Symptoms. For cure, let the Perſon be carried into free Air, the Mouth open'd, and Wind Artificially procur'd; let a liquid Vomit mix'd with the Eſſence of Caſtor, or Apoplectic Waters, be thrown down the Throat. Let Vinegar, in which Caſtor is infus'd, be exhibited by Spoonfuls. If the Perſon be Plethoric, open a Vein. Apply outwardly Epithema's of Vinegar to the Scrotum and Teſticles. Blow Sneezing Powders into the Noſtrils, and rub the Temples and Noſtrils with little bags of Marjoram and Fennel Flower ſeeds infus'd in Vinegar. Note, Tho Vinegar be of admirable Efficacy againſt the Gas or Steams of Vegitables, yet 'tis not proper againſt a Mineral Gas.

Laſtly, The cauſes of Suffocation relating to the Muſcles of the Breaſt, are their Paralytic or Apoplectic Condition, or Convulſions of the Larynx, occaſion'd by the diſorder of the Nerves of the Par Vagum and thoſe of the intercoſtal branch, as in the Caſe of Hyſteric and Hypochondriac fits, Poyſon, eating a ſort of ſtrangling Muſhrooms, Venery, *&c.* The cure is performed by the Eſſence of Caſtor, Volatil Salt of Amber, Camphyr, Opiats, and ſuch Medicines as we uſe againſt Hyſteric and Epileptic fits. Vomits, Oxymel of Squills, and Venice Treacle are Specifics againſt the poyſonous Muſhrooms.

CHAP. II.

Of Inſpiration depravd, or difficult Breathing.

ART. I.

Of Aſthma's.

AN Aſtma is a frequent difficult Reſpiration, attended by a perplexity in the Breaſt; and ſometimes a cough and ſnoring. Sometimes 'tis ſo violent, that the Patient can not

not breath unless he stand upright; and then 'tis called, Orthopnœa. The general cause of all Asthma's is the Constriction of the Vesicles of the Lungs. The particular Causes are various.

Some Astma's are moist, proceeding from vicious matter, provoking the Lungs and Wind-pipe to Contractions: and frequently attended by coughing, spitting and snoring, tho not always. Others are Dry, occasioned by the Convulsions of the Organs of Respiration, or dryness of the Lungs, without the influence of any deprav'd humor.

The Matter that gives rise to the moist sort, is frequently lodg'd in the Stomac and first Passages, and by distending them, presses the Lungs and Diaphragm; Hence wind and acid Crudities, such as Hypocondriac or Scorbutic Persons are generally lyable to, frequently cause a difficult Breathing in a Morning, when they lye upon their backs in Bed: Or after eating, especially at Night; or after drinking Wine. Dropsies also distending the Muscles of the Belly, and crouding the Blood with serum, may occasion a difficulty of Breathing.

If the matter lodge in the Lungs, 'tis either originally bred within 'em, or transfered thither from other parts. If it be bred there, it proceeds from the depravation of the Nutritious Juice of the Lungs, and Wind-pipe; occasioned by Mineral Steams, or Vicious Air, or the Viscidity and Sharpness of the Lymph that waters 'em. For if their Nutritious Juice be perverted, it degenerats into a tartareous, hard, or otherwise noxious matter. Impostumes and Ulcers in the Lungs may also be reckon'd as causes of this kind of Asthma.

If the Peccant humor be not bred in the Lungs, it proceeds either from serum thrown upon 'em or the Bronchia, or Blood stagnating within 'em. The former cause takes place, sometimes in the Declensions of Fevers, or when the Pores of the Body are stop'd; The latter in a Redundancy of Blood, Suppression of the Terms or Piles; in Cachectic Persons whose Blood is Glutinous and Stuffed with Crudities, and consequently requires more time for Rarefaction in the Lungs; in the case of sudden fear, or drinking of cold Water immediatly after the Blood has been rarify'd by a Violent heat. Any Acid matter that's apt to Coagulat the Blood may also produce the same effect.

As for dry Astma's; They may proceed from a preternatural form of the Back and Breast, or from Stones and

Schirrus's

Schirrus's in the Lungs: But the more notable cauſe is the Convulſions of the Organs of Reſpiration, eſpecially the Diaphragm, occaſion'd by the diſorders of the lower Belly, as in Hyſteric or Hypochondriac fits; the Contorſion of the Backbone; Nephritic, Arthritic and Gouty Pains; Or in General any Acid humor irritating the Nerves whether in the Abdomen or Brain; But eſpecially in the Abdomen, for the Nerves of the Par Vagum, and thoſe of the Inter-Coſtal Branch furniſh both the Belly, Breaſt, and Neck with Nerves; and upon this account we frequently obſerve that theſe Convulſive Aſthma's are attended by diſorderly Symptoms in the lower Belly. Beſides, if we conſider the variety and multitude of the Muſcles imploy'd in Reſpiration, and the various motions and contrary offices they are obliged to perform, we ſhall not be at a loſs to imagin what a ſenſible influence any ſort of Convulſions may have upon Breathing. This Convulſive ſort of Aſthma's may likewiſe be cauſed by the dryneſs and flaccidity of the Lungs, following the depravation of their Nutritious Juice; ſmoaking of Tobacco, Mineral ſteams frequently irritating the Fibres of the Lungs, *&c.* The like may inſue upon the ſtriking in of a Scab, or the unſeaſonable healing of an Ulcer, the Blood being thereby rendered ſharp and irritating, and its Texture prone to irregular fermentations.

An Aſthma is of its ſelf manifeſt. But the Symptoms ought to be heedfully regarded, in order to diſtinguiſh the various cauſes. Thoſe which proceed from a Vicious form of the Breaſt, or from ſerum, or ſlime covering the Lungs or from the Depravation of their own Nutritive Juice, are continual; Whereas the other ſorts are Periodical. All Aſthma's agree in this Symptom, that they are Exaſperated at Night, and when the Patient moves his Body, or Changes the Air. Moiſt Aſthma's are attended by a cough, ſnoring and comfortable expectoration of matter in and after the Paroxyſm. If the ſnoring make a deep hollow ſound, the matter lodges in the Bronchia. If it lodge within the ſubſtance of the Lungs the ſound is flatter, and the matter is not ſo copiouſly brought up.

Dry Aſthma's come ſuddenly and diſappear in like manner without any viſible cauſe, or diſcovery of noxious matter; They are not attended by ſnoring, coughing or ſpitting, unleſs it be towards the end of the Fit, and even then very ſparingly; For the matter thus expectorated is not the cauſe of the Diſeaſe as in the moiſt kind, but only

ſqueez'd

ſqueez'd out by the perplexity of the Muſcles, and agitation of the Lungs: Neither are they ſo greedy of inſpiration as of exſpiration, which is contrary to the method of moiſt Aſthma's. If the cauſe of the Convulſive kind come originally from the Head, the fit is uſhered in by Head-aches and Swimming of the Head; If from the Belly, by a murmuring noiſe in the Guts; If the Midriff be chiefly affected, Pain girds that part where it is joyned to the ſhort Ribs; If the Muſcles of the Breaſt, the whole Breaſt ſeems to be ſqueezed; If thoſe of the Throat and Wind-Pipe, they are as it were ſtrangled; If the Lungs themſelves, They can give no other account, but that they cannot breathe.

An Aſthma in Malignant Caſes, or Acute Fevers is a fatal Symptom. The Convulſive ſort is more common than the moiſt; and of the moiſt ones, that from the Stomac is more frequently met with. If an Aſthma be inveterat it ſeldom admits of a radical cure; and is oft-times followed by Cachexies, Swellings of the Feet, Dropſies, and then Death it ſelf.

If an Aſthma be only a Symptom of other Diſeaſes it yields to their cure. If it be of the moiſt kind, the viſcous matter ought to be attenuated and carried off, and the Stomac or Lungs fortify'd. The Convulſive kind is cur'd by appeaſing the Spirits, ſtrengthening the Nerves and diverting their cauſe by Bliſtering Plaiſters and Iſſues. In order to obtain theſe ends, the following cautions will aſſiſt us.

1. In the moiſt Aſthma's there's no Med'cine equals a Vomit. It equally clears both the Stomac and Lungs, and may be given in the very height of the fit, without the leaſt fear of ſtifling. In a dry Aſthma proceeding from the lower Belly, it may be exhibited after the Paroxyſm. Antimonial Preparations, or the Water or Syrup of Tobacco, or the Juice of the flower de luce, are proper on this occaſion. Some exhibit the Infuſion of white Hellebor in Rheniſh Wine. Some mix Emetic Ingredients with attenuating Med'cines, but in ſo ſmall Doſes, that they only Expectorat; others premiſe attenuating Med'cines by themſelves, and then exhibit a Vomit.

2. Cauſe a Vein to be ſpeedily open'd in any Aſthma whatſoever; and exhibit convenient Med'cines for diſſolving congeal'd Blood, correcting its Chachexy, and curbing its Turgeſcence.

3. During

3. During the Fit, let all manner of Purgatives be avoided. After the Fit is over, they are uſeful, but ought always to be mix'd with Gum Ammoniac. As,

Take of the Pills of Ammoniac, fifteen grains; Sweet Mercury, a ſcruple; Extract of Troches Alhandal, two grains; diſtill'd Oyl of Anis two drops. Make Pills. Some uſe *Quercetanus*'s Oxymel of Tobacco. Others the Decoctions of Aromatic Herbs and Senna, which evacuat gradually,

4. If the Diſeaſe proceed from ſerum, it ought to be carried off by Sweat, Urine, Bliſtering-Plaiſters and Iſſues. Sudorifics, eſpecially of the Decoction of Guajacum and Saſſafras, are always uſeful in dry Convulſive Aſthma's. They expectorate alſo and attenuate, and therefore are not improper for the moiſt ſort. If the Stomac be faulty, the Acid Crudity muſt be Corrected and Expell'd.

5. Narcotics are of Sovereign uſe both in and before the Paroxyſm of a dry Aſthma. In the moiſt kind, if the Symptoms are very fierce, they are not improper.

6. If it proceed from a particular cauſe, it requires a particular cure. As if it be caus'd by the retreat of a Scab or Itch, let volatil Sudorifics, ſuch as the Decoctions of Fumitory, Elecampane, Fennel, Extract of Venice Treacle, and the fixed Salts, be uſed for recalling the Itch; and if nothing prove effectual put the Patient to Bed with thoſe that are Scabby. If it proceed from Metallin Fumes, as Mercury, let Solar-Bezoar and Diaphoretic Antimony be exhibited. If from ſudden Cold, or drinking of cold Water, exhibit the Juice of Daſies in Wine.

The ſpecifics commonly us'd for moiſt Aſthma's, or ſuch as flow from a viſcid matter, whether in the Lungs or Stomac, are the Roots of Cuckowpint, Hyſſop, Horehound, Roſemary and its Flowers, Saffron, Speedwell, Zedoary, eſpecially its Spirit, the Juice of Briony, Elecampane Roots; The Syrup or volatil Salt of Tobacco for old Perſons, Eſſence of Saffron, Eſſence of Saſſafras; the Juice of Radiſhes; Oxymel of Squills mix'd with Cinnamon Water; Gum Ammoniac (above all) diſſolv'd in Vinegar; Compound Spirit of Verdigriſe mix'd with the thicken'd Juice of Coltsfoot; dulcify'd Spirit of Nitre; Elixir Proprietatis; Sulphur, or its Spirit *per Campanam*; the Water of Turneps; *Sperma Cæti*; Turpentin diſſolv'd with the yelk of an Egg in a convenient Vehicle; Balſam of Sulphur, prepar'd with Oyl of Anis; Juice of Woodlice with Wine

(an

(an incomparable Medicine) and the Carminative Spirit, if the Stomac be disorder'd. A Mercurial Salivation, or washes for the feet, in some Cases are very effectual.

Take of the Roots of Cuckowpint, four scruples; Roots of Florentin Orris, and Cinnabar of Antimony, of each two scruples; Flowers of Sulphur, and Benzoin in Powder, of each a scruple. Make a Powder. Note, the Fæcula's of Cuckowpint, Briony, *&c.* are good for nothing.

Take of the Leaves of Hyssop and white Horehound, of each two handfuls; Elecampane Roots, two ounces; Fennel seeds, half an Ounce; Anis seed, two drams; Terra foliata Tartari, three drams; Common Water, three pound; Scum'd Honey, half a pound. Boyl them in a close Vessel; Scum the Liquor and add three drams of Cinnamon, and a dram of Oriental Saffron. Strain it for use. Let the Patient take a draught twice or thrice a day.

Take of Hyssop and Speedwell Water, of each an ounce and a half; Cinnamon Water, an ounce; Essence of Zedoary, half an ounce; Gum Ammoniac dissolv'd in Vinegar, and a dram and a half; Oxymel of Squills, an ounce. Mix for two or three Doses.

Take of Hyssop, Poppy flower, and Asthmatical Waters, an ounce and a half; Asthmatical Spirit (prepar'd from Gum Ammoniac, Verdigrise and Brimstone) an ounce and a half; Oxymel of Squills, or Syrup of Tobacco an ounce.

Take of the Tincture of Tartar, half an ounce; Spirit of Sal-armoniac, two drams. Mix and take thirty or forty drops in a warm Vehicle.

Take of the Roots of Fennel, of Asarabacca, and of Florentin Orris, of each three drams; Liquorice, two drams; boyl them in Water till the third part be consum'd. To eight ounces of the strain'd Liquor and Gum Ammoniac, a dram; Oxymel of Squills, an ounce; Syrup of Horehound, an ounce or two. Mix. This is *Brunnerus* his Potion. Note, Sugar and sweet things ought to be cautiously us'd in this Disease; they are offensive to the Stomac and Lungs, and favour a Phthisic.

Take of Rape flower Water, four ounces; strong Cinnamon Water, half an ounce; Syrup of Tobacco, an ounce; Spirit of Sulphur, as much as sufficeth for a grateful Acidity. Mix, *&c.* A dram of Gum Ammoniac may be added.

Take

Take of the Wine and Infuſion of Woodlice, eight ounces; Extract of Elecampane Roots, two drams; Extract of Saffron, half a dram; Syrup of Hyſſop, and Syrup of white Horehound, of each two drams; Mix, and take a draught twice a day.

As for the Convulſive, dry Aſthma's, they are cured by premiſing a Vomit, excepting the caſe of Hyſterical Symptoms in which Vomits are improper; by exhibiting Antiepileptic Medicines, ſuch as the Volatil Salt of Amber; the Spirits of Tartar, Amber, Hartſhorn, Sulphur and Sal-armoniac; eſpecially the Eſſence of Caſtor whoſe Oyly Salt conquers the Acid moſt effectually; the Spirit of putrifyed Earthworms, and the diſtill'd Oyls of Amber, Anis, and Turpentin, mix'd with Narcotics. Externally we apply the Oyl of ſweet Almonds with Saffron to the Breaſt; and Bliſtering Plaiſters to the Shoulder-blades and Arms.

ART. II.

Of a Hiccough.

THE Hickets are a Convulſive motion of the Diaphragm, bending it downward, diſtending the Belly, and provoking it to accelerate and interrupt Inſpiration. The Antients refer'd it to the Stomac, but its influence over the Belly, its neceſſary dependence upon Inſpiration, its ready obedience to the command of our Will, its being cured by continued Inſpiration, Sneeſing, Mirth, and violent Paſſions, argue that 'tis Seated in the Middriff. 'Tis true, the irritating cauſe is frequently lodg'd in the upper Oriſice of the Stomac, from whence it has a ſhort influence upon the Middriff, thro' which the Orifice paſſes. Thus Sharp, Acid, cold Liquors and Victuals, or an Acid Viſcous Phlegm in the Stomac, ſuch as Children are obnoxious to, are frequently the Authors of this Diſeaſe: As alſo the Convulſive motions of any other Membrane that correſponds with the Middriff, violent Purgatives, diſjoynting of the Ribs, Inflammations of the Liver, Ruptures, and whatever injures the Guts, or adjacent Menbrans. If a Hiccough proceed from the aſſumption of ſharp Liquors or external things, 'tis not ſo dangerous, as when it follows the Inflammations of the Liver, Coſtiveneſs, Colics, or Fevers, eſpecially towards their height.

The Cure consists in abating the Convulsive sense of the Middriff, and removing the material cause. The former end is compassed by Narcotics mixed with Specifics. Now the Specifics are Cinnamon, Mastic, Galangal, Ginger, Aniseed, burnt Hartshorn or Ivory, Spirit of Sal-armoniac and especially Castor.

Take of *Venice* Treacle, half a dram; Laudanum Opiatum, two grains; Aniseed, half a Scruple; distill'd Oyl of Mace, two drops. With the Juice of Quinces. Make a Bolus.

If the Evil be inveterate 'twill be necessary to Vomit; or, at least to Purge with Pills of Aloe and Sweet Mercury mix'd with Laudanum. After their Operation is over exhibit the following mixture.

Take of Wine impregnated with Quinces, and the Tincture of Roses, of each an ounce; Extract of Zedoary, fifteen Grains; Laudanum Opiatum, two grains; distill'd Oyl of Orange Peel, four drops; Syrup of Quinces, half an ounce. Mix, *&c.* If the Stomac be distended with Wind, add the dulcify'd Spirit of Nitre; if the Person be molested with Hysterical Symptoms, add the Extract of Castor.

Externally we apply to the Stomac Cataplasms of yest, Aromatic Powders, and Oyl of Castor; or hot Bread soak'd in *Spanish* Wine, or in Vinegar, in which Pepper, Castor and Mustard seeds are boyl'd.

If a Hiccough proceed from Crudities in the Stomac, besides the general method of Vomiting and Purging with Aloe, 'twill be requisite to exhibite Stomachical Mixtures of the Essence of Zedoary, Spirit of Mastic, Elixir Proprietatis prepar'd with Spirit of Sal-armoniac, Essence of Wormwood, *&c.* If it be occasion'd by sharp Corrosive rasty humors, 'twill be needful to joyn the abovementioned Specifics with absorbent Powders, such as Seal'd Earth, Crabs Eyes, Coral, Solar Earth, and above all the Inner-skin of a Hens Breast. If it takes its Root from Poyson, or be Accompany'd by Malignity, let Alexipharmacal Ingredients be added. In Fevers, Antimonial Nitre given to a dram, is of noted efficacy. If sudden Cold, or drinking of cold Liquors immediately after heat gave being to the Disease, 'twill be proper to Bath in the Decoction of Nervous Plants.

ART.

ARTIC. III.

Of the Night Mare.

THe Night-Mare is either Accidental or Habitual. The former is occaſion'd by the Diſtention of the Stomac with Wind or Crudities, and prevails when Perſons are aſleep and lie upon their Backs. For then the Stomac dilated preſſes the Middriff and Muſcles of the Breaſt moſt; and ſo incumbers the deſcent of the one and dilatation of the other, which are neceſſary for Inſpiration. Thus the Blood ſtagnates in the Lungs, and the Perſon is not able to ſpeak or breath freely, but fancies himſelf preſs'd by ſome particular Object. The Habitual is occaſioned by ſome Acid Lymph that diſorders the Spirits and Creates a Paralytic or Convulſive Diſpoſition of the Nerves of the Middriff and Muſcles of the Breaſt; which by conſent Cramp thoſe of the Wind-Pipe, whoſe Contraction raiſes a ſenſe of ſtrangling, and aboliſhes the power of an Articulate Voice. Hypochondriac and Scorbutic Perſons are moſt ſubject to this habitual ſort, which is frequently attended by red ſpots in the skin, and ſeems to be near a-kin to an Epilepſie. Sometimes 'tis the effect of Worms, and equally attacks the Patient both by Night and by Day.

The Symptoms are a difficult Reſpiration (for the moſt part in the time of ſleep) an imagination of ſomething heavy preſſing the Breaſt, a querulous inarticulate noiſe, an inability to move; and after the Perſon is awake and the Paroxyſm over, a wearineſs of the Limbs, Anxiety of the Breaſt and Palpitation of the heart. If it be Habitual and come by day, and be follow'd by a Trembling, Swooning, and cold Sweats, 'tis very dangerous, and Prognoſticates Convulſions to young Perſons, and Apoplexies to the old.

The cure conſiſts in evacuating the Stomac, regulating the Diet, avoiding ſleep ſoon after eating; and obviating Convulſions. Firſt, let Vomits be exhibited; Or, if that cannot conveniently be done, Purge with the Extract of black Hellebor, ſweet Mercury, and Extract of Troches Alhandal mix'd with Oyl of Amber; or with the Pills call'd Aloephanginæ, and Elixir Proprietatis. If Wind diſturb the firſt Paſſages, inject a Carminative Clyſter. Then exhibit

bit the oyl of Aniseed and spirit of Sal-armoniac, or Venice Treacle and Piony Water, over Night. In a word, all Epileptic Specifics are proper. In the Paroxism it self, if Vomits are inconvenient, give the following mixture.

Take of Hyssop Water, two ounces; Mint water, one ounce; Cinnamon water, half an ounce; Spirit of Salarmoniac, two drams; Syrup of Tobacco, an ounce. Mix and give it by spoonfuls.

CHAP III.

Of Disorders relating to Exspiration.

ART. I.

Of Immoderate Sneezing.

SNeezing is a convulsive motion of the Middriff, Muscles of the belly, and those of the breast, occasion'd by tickling the inward Membran of the Nostrils. In this Convulsion the Middriff ascends into the breast, and the Muscles of the belly and those of the breast straiten their Capacities, and so cause an impetuous exspiration. The Irritation is conveyed from the Nostrils to these Muscles, by means of the Intercostal Nerves which correspond immediately with those of the third and fourth pair; and the effect of it is, that the Middriff is first contracted and pulled downwards to give way to a large Inspiration, upon which it rebounds up with force and violence. The remote causes of Sneezing are various, according to the sensibleness of the Membran, for some who by the frequent use of snush, have procured a plentiful descent of Rheum into the Nostrils, are not so easily moved. In general all sharp things from without, nay, or a sharp acid Lymph from within, and sometimes the Injoyment of Women, will cause it. The matter that is evacuated by sneezing proceeds chiefly from the Nostrils and Palate, and adjacent Glandules, and secondarily from the Breast, Wind Pipe and Lungs; If sneezing be violent and frequent it discovers great disorder among the Spirits. 'Tis hurtful to the Eyes promotes the Terms, and encourages the pains of Child-birth.

'Tis cur'd by applying Laudanum, or the Oyl of Roſes with Opium to the Noſtrils, and giving Narcotics inwardly.

If it proceed from ſharp External objects, let ſweet Milk, or the mucilage of Quince and Fleawort ſeeds, or the Infuſion of Fennel and Aniſeeds in Vinegar be injected into the Noſe.

ARTIC. II.

Of diſorders of the Voice.

THe Voice is the ſound of the Air expell'd by the Wind pipe, and conſequently differs from Speech, which is form'd by the Tongue. The firſt diſorder 'tis obnoxious to is that of a total Abolition, which may ariſe from three ſources. 1. When the Muſcles of the Wind pipe are Paralytic, and do not ſqueeze out the Air; as if a redundancy of moiſture over-charge 'em, or if the Recurrent Nerves are cut, or if an Apoplectic diſorder ſieze the Spirits. 2. When the Muſcles and Nerves of the Wind pipe are contracted by Convulſions, ſo that they hinder the Paſſage of the Air. Thus the Small Pox, a recent Clap, and Worms have been obſerv'd for its Authors. 3. When the Spirits are ſuddenly diſorder'd by Fear, or violent Paſſion.

If a want of Voice accompany an Apoplexy, or malignant Fevers, or the Hickets, 'tis an ill Omen. If follow'd by a Looſeneſs (to which ſtammering Perſons are obnoxious) it generally diſappears.

For Cure, the Irritation muſt be appeas'd; the Palſie remov'd; Or, the prevailing humidity diſpell'd. For which end the Spirit of Sal-armoniac diſtill'd with Oyl of Amber and Eſſence of Caſtor, the Spirit of Wine impregnated with Lavender Flowers, the Sudorific Decoctions of Woods, and chewing Medicines are proper; as alſo Blooding in ſome Caſes. Externally, we apply bags of Aromatic Ingredients ſprinkled with Spirit of Wine, or that of Ants; Venice Treacle, or Balſam of *Peru* mix'd with the Eſſence of Caſtor and the Oyls (by Decoction) of Amber, Lavender, Spike, *&c.* Or the mouth may be Gargled, as follows.

Take of Sage and Roſemary Leaves, of each a handful; Rocket and Muſtard ſeeds, of each a dram; boyl them in a cloſe Veſſel. To a pound of the ſtrain'd Decoction, add of the Spirit of black Cherries, and Spirit of Sal-

Sal-armoniac, of each a dram; Hony of Rosemary Flowers, a dram. Mix for a Gargarism.

The second disorder of the Voice is a Hoarseness; occaon'd by a prevailing moisture in the Wind-pipe, separated by the Glandules that open into it, and the Glandulous Membran that lines it within. A Recent Hoarseness supposes a thin humor; but the inveterate argues it thick and slimy. The remote causes are either External or Internal. The former are Acid Fumes, sharp Liquors, much speaking, or whatever Irritates the Wind pipe, and promotes the Constriction of its Glandules. The latter are the prevalency of a sharp tickling serum in its Glandules, as in the Scurvy, *French* Pox, and a Cough; the stuffing of the Nose, and the Indisposition of the Lungs. If a Hoarseness be inveterate, and spring from internal causes, 'tis very dangerous.

The Cure is vary'd according to the consistence of the peccant Lymph. If it be thin and sharp it discovers it self by its manner of tickling, and the thinness of what is cast up: And requires tempering, thickening, Pacific Medicines; (Purgatives being first premis'd if there be occasion.) Such are the Syrup of Poppies, or Diacodium, Liquorice, the Juice of Rapes, Raisins, Sperma Cæti given to a dram in a warm Vehicle, the mucilage of Marshmallow Roots, the Oyl of Sugar, the Balsom and Flowers of Sulphur, Myrrh, and especially the Syrup of Jujubes. As,

Take of the Syrup of white Poppies, six drams; Syrups of Violets, Liquorice and Jujubes, of each half an ounce; Rob of Mulberries, three drams. Make a licking mixture. Or,

Take of the Juice of Liquorice, two drams; Myrrh, a dram; Tragacanth a Scruple; clarify'd Sugar, two ounces. With Rose Water, make Tablets to be gradually melted in the mouth.

If the Hoarseness be inveterate, and the Lymph become thick and crusty, Bleeding is pernicious; but attenuating Ingredients are proper. Such are Hedg-mustard, or its seed form'd into an Electuary with the Pulp of Corants; the Balsam of Sulphur with the Powder of Cuckowpint Roots, the Spirit of Sal-armoniac, Cubebs, the thicken'd Juice of Coleworts; Oxymel of Squills; and an Electuary made of Hony, Elecampane Roots, Sage, and Water Germander-leaves. Or,

Take of Scabious Water, three ounces; the Aſthmatical Water, ſix drams; Spirit of Sal-armoniac Aniſated, a dram and a half; Syrup of Hyſſop, and Syrup of Hedg Muſtard, of each ſix drams. Mix for a Potion.

Take of the clarify'd Juice of Coleworts, two ounces; Powder of Cuckowpint Roots, a dram; with Oxymel of Squills, make an Electuary.

ART. III.

Of a Cough.

A Cough is a frequent and interrupted Exſpiration, or Convulſion of the Middriff and Muſcles of the Breaſt, attended by a conſtriction of the Wind Pipe, without which 'twould make no noiſe. The immediate cauſe is the irritation and provocation of the Wind Pipe, or Lungs; or of the Muſcles dedicated for Reſpiration. This may proceed either from an irritating matter ſeated directly in theſe places: Or from a foreign cauſe conveying its influence, by the commerce of the Nerves, and creating a Convulſive dry Cough, ſuch as Hypochondriac and Hyſteric Perſons, or thoſe in whoſe Bodies an Acid prevails, are very liable to. But we ſhall confine our thoughts to that which proceeds from the immediate influence of ſome material cauſe. And in order to form a diſtinct Idæa of it, ſhall conſider both its External and Internal cauſes, ſuppoſing ſtill that the diſtinction of a dry and wet Cough is minded and underſtood.

The External cauſes are Acid Mineral Fumes, ſharp Liquors, hard Food and an intemperate Air. The Acid Fumes and ſharp particles of Air tickle the Wind Pipe, and Pituitous Membran that lines the Palate, and by influencing the Nerves of the Muſcles of the Breaſt (which ſpring from the ſame branch of the intercoſtal Nerve, as thoſe of the Wind Pipe) occaſion the contraction of the Breaſt and expulſion of what it contains. In like manner ſharp liquors or grating food, by tickling that part of the Gullet which immediately joyns the Wind-Pipe, produce the ſame effect. Now this Irritation at the firſt occaſions a dry Cough, and ſqueezes only a thin ſerum from the contracted Glandules, But if it continue long the parts are inflamed, or corroded, and their nouriſhment degenerats into a ſlimy, thick matter, which chriſtens it a wet Cough. The Antients imagin'd

gin'd that this matter either distill'd from the Head, or was deposited in the Lungs by the Blood; but they were misken, since this vicious matter is rather the effect than the cause of a Cough.

The internal causes relating to a wet Cough, are seated either in the Wind Pipe and Lungs, or in the Gullet and Stomac. Those in the Wind Pipe and Lungs are the sharpness of the serum deposited by the Blood, Ulcers, Impost-humes, Inflammations, Morbifical matter transfer'd thither in the Declensions of Acute Diseases, Stagnation of Blood in the Lungs, and the suppuration of a Pleurisie, Empyema, or Peripneumonia. Now all these causes occasion the Collection of irritating humors, and convert the Nutritious Juice of the parts into a thick, sordid, purulent matter; Nay, sometimes carry the corruption so high that pieces of the very Lungs and Veins, Worms, Stones, *&c.* are cast up.

The Internal causes of a wet Cough relating to the Stomac, are a defluxion of a viscid Lymph from the hinder Membrana Pituitaria into the Stomac, or indigested Crudities collected about its upper Orifice; but especially the first. This Lymph falling from the Membran into the Stomac, gave occasion to the Error of the Ancients in refering such Catarrhs to the Head. When it irritates the Stomac, especially those parts which joyn the Wind Pipe and Middriff, it occasions their Constriction which seldom ceases till some part of the offending matter be cast up. These Coughs proceeding from the Stomac, are more frequent than those from the Breast; from whence we may discover the mistake of those who fancy'd that the matter cast up by Coughing came always from the Lungs.

The internal cause of a dry Cough, is the sharpness of the Lymph watering the Throat, and separated by its Glandules for that purpose; occasion'd by a weak digestion, or crudity of the Chyle in the mass of Blood. Sometimes a thin salin humor provoking the upper orifice of the Stomac, doth likewise cause a vehement dry Cough, as the chin Cough of Children. But if the Humor or Lymph become thick, it degenerates into a wet one. In the Paroxysms of intermitting Fevers, we frequently meet with dry Coughs that proceed from a vicious fermentation of the humors in the Duodenum, irritating the Stomac, and consequently the Middriff and Wind Pipe. Preternatural excrescences in the Lungs and Organs of respiration, may be also listed among the causes of dry Coughs.

As for the Diagnoſtics of Coughs. A wet Cough is known by the viſcous matter it brings up; as a dry one by its ſmall quantity of thin ſerum. As for wet Coughs, a ſuperficial ſound, eaſie Reſpiration, and the high ſeat of the Pain, diſcover their Original from the Wind Pipe; as a difficult Reſpiration, or an aptneſs to Cough upon a large Inſpiration, a hollow hoarſe ſound follow'd immediately by evacuation, night Fevers and Phthiſical Symptoms, refer 'em to the Lungs: But a Pain and Weight under the Pit of the Breaſt, attended ſometimes by a difficult Reſpiration and Vomiting of Phlegm, a deep hollow ſound with a tearing fierce Cough, and Proſtration of the Appetite, aſcribe 'em to the Stomac. A dry Cough proceeding from ſharp ſaltiſh Lymph relents in the day-time, and towards evening reaſſumes its former force, with a gentle ſhivering, follow'd by a violent heat, and night Fevers. Such are thoſe that uſher in the ſmall Pox, or Phthiſics, or follow the retreat of Cuticular Eruptions in Children. Their Nocturnal Exacerbations are common to all Lymphatic Diſeaſes, and are in ſome meaſure caus'd by the want of equal Tranſpiration with that of the day. But theſe dry Coughs always become wet by continuance. The Coughs that Old and Arthritic Perſons are ſubject to, ſeem to proceed from a weak digeſtion in the Stomac, where the crude viſcid Matter aſſembles and provokes the adjacant Wind Pipe and Midriff. Sometimes Pectoral and Stomachical, Moiſt and Convulſive Coughs are mutually Complicated.

Violent Inveterate Coughs threatens Ruptures, or Miſcarrying; and promote Infirmities of the Head and Eyes. A Stomachical Cough continuing long, vitiates the Lymph and produces a Phthiſic, as alſo the Nocturnal dry Coughs. To Scorbutical or Hydropical Perſons, any Cough is an ill Omen.

The cure conſiſts in allaying the Irritation, and removing the offenſive Cauſe; for which ends Opiats, Vomits, Thickening, Attenuating and Vulnerary Medicines are in uſe. However, for obtaining a diſtinct method of cure, let the following directions be minded.

1. Opium is not convenient in wet Coughs (*viz.* Thoſe attended by a viſcid matter) till the Univerſal Evacuations are premis'd. A dry Cough caus'd by external Air, or Mineral ſteams, is admirably cur'd by Laudanum Opiatum in the beginning. To which we add *Sylvius*'s Pills of Storax;

The

The Decoction of Zedoary in Wine; the Decoction of Raisins and Elecampane Roots in Wine; Or of Juniper-berries in Ale; taken in order to sweat. For Preservatives against the influence of the Air, we may anoint the Nostrils with the distill'd Oyls of Anis, Amber and Mace; and snuff up the Powder of black Hellebor mix'd with Sugar and Oyl of Cloves.

2. If an accidental dry Cough by continuance become moist, and void slimy matter, let a Vomit be first exhibited, and then Opiats, followed by Pectoral Vulnerary Prescriptions if the matter be lodg'd in the Breast, and Stomachical Aromatics if it lye in the Stomac. The Pectoral Ingredients are Ground-Ivy, Chervil, Speedwell, Scabious, Elecampane Roots, Coltsfoot and Sassafras. The Stomachical are, Mint, Zedoary, Elixir Proprietatis, *&c.*

3. A wet Pectoral Cough is formally cur'd by Attenuating and Expectorating Ingredients interlac'd with Vomits, or moderate Purges; and follow'd by Vulnerary Medicines for healing the corroded parts.

The Attenuating Ingredients are Cuckowpint Roots, the fresh Juice of Radishes given with Sugar, the Decoction of Horehound or of Elecampane, Gum Ammoniac, Ground-Ivy, Hyssop, Ginger, Syrup of Tobacco, Oxymel of Squills, Hedge Mustard, Spirit of Sal-armoniac, Aniseeds, and the Carminative Spirit *de tribus* given to forty drops thrice a day.

Take of Hyssop Water, two ounces; Speedwell Water, an ounce; Asthmatical Water, half an ounce; Spirit of Sal-armoniac, a dram; Syrup of Tobacco, an ounce. Mix, *&c.*

The Vulnerary Ingredients are the Flowers of Sulphur, the Balsam of Sulphur Anisated given to fifteen drops in the yelk of an Egg twice a day, Benzoin, *Poterius*'s Antihectic, Diaphoretic Antimony, and the Vulnerary Plants.

Take of the Herbs Speedwell, Ground-Ivy and Scabious, of each a handful; Chervil, a handful and a half; Shavings of Sassafras, an ounce. Boyl them in Water, adding at last bruis'd Corants, two ounces; Liquorice Roots, an ounce; and after 'tis taken off the fire, three drams of Cinnamon hung in a bag.

4. A wet Stomachical Cough proceeding from a viscid matter in the Stomac is cur'd by exhibiting first Vomits, then Purges mix'd with attenuating Ingredients; As,

Take of the Pills of Hiera and Agaric, fifteen grains; Gum Ammoniac diſſolv'd in Vinegar, half a ſcruple; Extract of Troches Alhandal, two Grains; diſtill'd Oyl of Anis, two drops. With eſſence of Gum Ammoniac, make Pills. Sweet Mercury may alſo be added.

After Purgation it will be requiſite to prepare the matter for Expectoration by attenuating compoſitions; and towards the end, when the viſcid matter is in good meaſure evacuated, we may add the Syrup of Poppies. As,

Take of Cuckowpint Roots, a dram and a half; Gum Ammoniac diſſolv'd in Vinegar, Maſtic, of each a ſcruple; Tartar Vitriolated, half a dram. With Sugar diſſolved in Mint Water, make Tablets.

Take of Hyſſop and Mint Water, of each an ounce; Aſthmatical Water, ſix drams; Cinnamon and Oxymel of Squills, of each an ounce; Gum Ammoniac diſſolv'd in Vinegar of Squills, two drams; dulcify'd Spirit of Salt, as much as ſufficeth. Mix. Doſe a ſpoonful now and then.

After the uſe of attenuating Medicines, 'twill be proper to ſtrengthen the Stomac by Elixir Proprietatis, Eſſence of Elecampane, decoction of Zedoary, Spirit of Sal-armoniac, Eſſence of Saffron; and Chocolate which is uſeful againſt all Coughs; As Sage and Water Germander leaves, Flowers of Sulphur, and Laudanum Opiatum, mix'd with the Syrup Diacodium in the form of an Electuary, are very convenient againſt all wet Coughs.

5. Dry Nocturnal Coughs proceeding from the acidity and ſaltneſs of the Lymph, are cur'd by Volatil Sudorifics mixed with Opiats, a Vomit being premis'd if it be needful. The Volatil Sudorifics are the Spirit of Sal-armoniac, or the Spirit of Hartſhorn ſuccinated mix'd with the Eſſence of Opium, Amber, Mirrh, *Sylvius*'s Pills of Storax; to which we may ſubjoyn the incraſſating Pectorals, ſuch as the flowers of Sulphur given to a ſcruple in a potch'd Egg, Benzoin, Sperma Cæti; the diſtill'd Oyls of Anis and Fennel, the Syrup of Jujubes, the decoction of Rapes (a very ſucceſsful Med'cine) the Juice of Liquorice purg'd from its adulterating ingredients by a diſſolution in Hyſſop Water, Gum Arabic, Marſhmallow Roots, *&c.* For Example.

Take of the Spirit of Sal-armoniac ſuccinated, Tincture of Sulphur, of each a dram; Eſſence of Opium, half a dram. Mix. Doſe forty drops, to be taken two hours before Supper.

Take

Take of prepar'd Amber, half a ſcruple; choice Myrrh, and volatil ſalt of Amber, of each five grains: Extract of Saffron, two or four grains; Laudanum Opiatum, one or two grains; with the Eſſence of Saſſafras make Pills, to be taken two hours before ſupper.

Take of Sperma Cæti, a dram; Flowers of Benzoin, a ſcruple; Myrrh and volatil ſalt of Amber, of each half a ſcruple; Laudanum Opiatum, four grains. Make a Powder for four Doſes.

Take of the conſerve of red Roſes, two ounces; *Poterius*'s Antihectic, a dram and a half; the flowers of ſulphur, and Powder Diaireos, of each two ſcruples. With Diacodium. Make an Electuary.

Take of white Henbane ſeeds, white Poppy ſeeds, of each half a dram; Frankincenſe and Myrrh, of each a ſcruple; Saffron, half a ſcruple; thicken'd Juice of Liquorice, a dram; Sugar of Marſhmallows prepar'd with the mucilage of Marſhmallows, half an ounce; Gum Tragacanth diſſolv'd in Roſe Water, a dram. Laudanum Opiatum, a few grains. Make ſmall Tablets to be melted gradually in the mouth.

Take of the Roots of Florentine Orris, two drams; flowers of Sulphur, a dram; diſtill'd Oyl of Anis, half a dram; diſtill'd Oyl of Fennel, fifteen drops; white Sugar, three drams. Make a Powder, of which exhibit a dram twice a day.

Take of the Extract of Sulphur Pulveris'd, twelve grains; Extract of Saffron, two grains; choice Myrrh, four grains; Laudanum Opiatum, a grain; with the Eſſence of Amber, Make Pills.

Take of Storax, Extract of Liquorice, Olibanum, Myrrh, and Laudanum Opiatum, of each half a dram; Oriental Saffron, a ſcruple. With the Syrup of white Poppies. Make Pills. This is the Compoſition of *Sylvius*'s Pills of Storax which are of Excellent uſe in Nocturnal Coughs. The Juice of Liquorice is frequently adulterated, and do's more harm than good; to prevent this Inconvenience, 'twill be requiſite to preſcribe always the Juice of *Spaniſh* Liquorice, or at leaſt to diſſolve the ordinary Juice of Liquorice in Hyſſop Water, and ſtrain it before it be thicken'd; that ſo the impure dregs may be ſeparated.

If the Nocturnal Fever be troubleſome; take of Scabious Water, four ounces; Aſthmatical Water, half a dram; Spirit of Hartſhorn ſuccinated, a dram and a half; Diacodium,

dium, six drams. Mix and Exhibit before the Paroxysm, in order to sweat.

Towards the finishing of the cure, 'twill not be improper to Purge, thus; take of *Crato*'s Pills of Amber, sixteen grains; Extract of Agaric, eight grains; Troches Alhandal and Scammony sulphurated, of each two grains. With the Essence of Sassafras. Make Pills.

6. If a dry Nocturnal Cough continue so long that it begins to void corrupt matter, and that the Lungs are Ulcerated, let a draught of the Decoction of Guajacum and Sassafras, or of China and Raisins, be exhibited every morning; and Opiats at Night. And apply an Ointment of Hogs Tallow and Onion heads to the feet in the evening, for three days together.

7. The dry chin Cough arising from the Stomac, is cur'd thus. First, give a Vomit, then exhibit twice a day a spoonful of the Decoction of Elecampane and Corants in *Spanish* Wine, mix'd with Diacodium. The Decoction of Rapes is equally effectual, both in this and all other dry Coughs. Or,

Take of the Compound Tincture of Tartar, two drams; Spirit of Sal-armoniac anisated, a dram; Essence of Opium half a dram. Dose forty drops thrice a day.

In general; all dry Coughs are treated as Catarrhs, and the moist sort as wet Asthma's.

8. As for the Convulsive Coughs arising by sympathy from the influence of foreign Membranes, they are cur'd, as Convulsions by Volatil Salts.

9. If the Throat and Palate be excoriated, 'tis customary to give some thickning licking Medicines for defending the passage. This gave occasion to the Vulgar mistake, as if such licking Medicines should drop into the Wind Pipe; whereas they only keep the throat easie. Such are the Syrups of Jujubes, Coltsfoot, Liquorice; and the Oyl of Sugar thus prepar'd.

Take of the Spirit and Oyl of Juniper-berries, of each four ounces; white Sugar, two ounces. Kindle the Spirit, and the Sugar, or Oyl will remain. Which mix with the Extract of Saffron to be often lick'd of.

ART. IV.

Of a choaking Catarrh.

THat which the Ancients call'd a choaking Catarrh, is a Diſeaſe cauſing difficult Reſpiration, and Threatening Suffocation; which ſeems to be Complicated of an Aſthma, Cough, and Hoarſeneſs. The Ancients fancy'd that a Catarrh falls from the head, and overflows the Lungs; but Anatomy affords no paſſage for ſuch a deſcent, and therefore we ſhall wave their Opinions. For the moſt part Convulſive Aſthma's are miſcall'd Catarrhs; or whatever Symptom of this Nature is different from them, may be caſt into theſe four heads.

1. A fear of Suffocation may inſue when the Lungs are ſtuff'd and provok'd to contract their Fibres by a viſcid Heterogeneous Acid; as if ſulphureous fumes ſhould ſtick to 'em like ſoot to a Chimney, they'd provoke the Lungs to contract and ſqueeze out Lymph, with which they joyn in the form of a new Concrete, till being concocted together they find a vent by Expectoration. Upon which the Contraction and Difficulty of Breathing ceaſes; but the Nutritious Juice of the Lungs is ſo deprav'd that they retain a propenſity to relapſe upon the leaſt occaſion. The Acid that prevails in Children renders them alſo liable to this Symptom. 'Tis cur'd by Opiates and Thickening Medicines.

2. When the head of the Wind Pipe and Epiglottis are provok'd to Contraction, as when a bit of Bread falling into it cauſes a Coughing, Hoarſeneſs, difficult breathing and voiding of matter. The cauſe in reſpect of the Larynx, is either External or Internal. The former is a viſcous thick Lymph falling from the hinder Membrana Pituitaria into the Wind Pipe, eſpecially in the night time, and when the Patient lies on his back, which irritates and tickles the head of the Wind Pipe, provokes the Epiglottis to ſhut and hinder Reſpiration, occaſions a hoarſeneſs, ſnoring and ſpitting of thin matter, which in proceſs of time becomes thick and concocted. The latter is a ſharp Lymph, lodg'd within the Wind Pipe, and producing the like effects.

As for cure, if it proceed from the cauſe that is External or Foreign to the Wind Pipe, it requires a Vomit

mit and attenuating Medicines, *viz.* The Juice of Radiſhes, Syrup of Tobacco, Gum Ammoniac, *&c.* And in a word, the ſame cure with the inveterate moiſt Cough. As for Example.

Take of Hyſſop Water, Mint Water, and the Water of Tobacca, of each an ounce; the Aſthmatical Water, ſix drams; Oxymel of Squills, half an ounce; Syrup of Tobacco ſix drams, or an ounce. Mix and make a Potion, of which give a ſpoonful now and then.

To theſe and ſuch like mixtures, we may add opiates now and then. The Water of Hedge Muſtard with Gum Ammoniac diſſolv'd in Vinegar, the Roots of Cuckowpint, and *Michael*'s Aſthmatical Spirit prepared from Verdigris and Gum Ammoniac, are alſo very proper.

If this Symptom proceeds from an internal cauſe, 'tis cur'd by ſudorifics mix'd with Opiates, Vomits being premis'd, if there be occaſion; after the ſame manner as a dry Nocturnal Cough proceeding from a ſharp Lymph.

Take of Mint Water, Scabious Water, Water of Mother of Thyme, of each an ounce; Aſthmatical Water, ſix drams; Spirit of Sal-armoniac Aniſated, two drams; Flowers of Sulphur, half a dram; Syrup of Diacodium, an ounce. Mix and give a ſpoonful now and then. Or,

Take of the Eſſence againſt Catarrhs, three drams; the Spirit of Sal-armoniac Aniſated, a dram. Mix and Exhibit a convenient quantity frequently.

Take of Aqua Articularis ad Extra, two drams; Spirit of black Cherries, and of Lilly of the Vally, of each a dram; Eſſence of Opium, two ſcruples. Mix and apply it with a warm cloth to the Region of the Larynx, eſpecially when the Perſon is ſenſible of a tickling, or conſtriction in that part.

If this Diſeaſe return frequently let an Iſſue be cut in the Arm. Clyſters, Blood-letting, Bliſtering Plaiſters; and all the Stratagems of the Ancients calculated for Defluxions from the head are of no uſe.

3. The third ſort of Suffocation, or Catarrhus Suffocativus, happens when the Blood ſtagnates in the Lungs. In this Caſe it is coincident with a Syncope Cardiaca, approaches to a Peripneumonia, and is attended by the Symptoms of an Apoplexy. Nay, Apoplectic Perſons when dead, have their Lungs ſtuff'd after the ſame manner as thoſe who dye of this diſtemper; and there-

for

fore *Hippocrates* ſtyl'd it a ſtrangling *Aph.* 13. *Sect.* 2. The froth that ſometimes attends this Paroxyſm, proceeds from the impriſon'd Blood in the Lungs, when rarify'd by Air: Thus, if we inject Oyl of Turpentine into a Dogs Veins, it congeals the blood in the Lungs, and cauſes a plentiful evacuation of froth. The ſlime that is alſo voided, proceeds from the Glandules of the Wind Pipe, which are provok'd to frequent Contractions by the Anxiety of the Breaſt, and ſo ſeparate large quantities of ſerum, which accompanies the Air in Exſpiration. Beſides, the Pituitous Membrane being ſtraiten'd by this Anxiety diſtills a viſcous Lymph upon the Wind Pipe, which helps to make up the quantity.

The remote cauſes of this ſtagnation (which the Ancients erroneouſly miſcall'd a Catarrh) are. 1. The redundancy or over-bearing Turgeſcence of Blood. 2. The viſcidity of the Blood occaſion'd by crude Chyle. 3. Its Coagulation caus'd by cold Air, by an inconſiderate aſſumption of cold Water immediately after great heats; by fear, or by the influence of a vicious Acid. 4. The accidental obſtruction of the Lungs, by Stones, Excreſcines, *&c.*

The Symptoms are a ſenſe of weight upon the Breaſt, difficulty of breathing, danger of choaking, a very ſlow Pulſe, and ſometimes a Cough, and a fatal evacuation of froth and ſlime. 'Tis diſtinguiſh'd from an Apoplexy, by the difficulty of Reſpiration and lowneſs of the Puſe.

For Cure; Blood-letting is abſolutely neceſſary; and ought to be perform'd betimes; after which a ſharp Clyſter may be injected; and ſcarrifying Cupping-glaſſes applied to ſeveral parts of the Body. Then give Sperma Cæti to a dram in Hyſſop Water. Gum Ammoniac diſſolv'd in Vinegar, or its Spirit prepar'd with Verdigris, Saffron, volatil ſalt of Amber, Spirit of Hartſhorn, Crabs Eyes, Diaphoretic Antimony, the Juice of the flowers of red Daſies, and the Vulnerary herbs, eſpecially the Juice of Radiſhes, are alſo very proper. As for the Ligatures, Frictions, Cataplaſms, Plaiſters, Gargariſms, *&c.* recommended by the Ancients, they are of no uſe; as being only contriv'd in purſuit of their miſtake, aſſigning a Chimerical defluxion from the head for the cauſe of this Diſeaſe.

Theſe three different ſorts of choaking Diſeaſes, miſcall'd Catarrhs, ought to be carefully diſtinguiſh'd; by reaſon that their Cures are ſo very different.

SECT.

SECT. XV.

Of the accidents that disturb the transformation of the Chyle; and fermentation of the Blood.

THe Chyle being separated in the Guts, and convey'd thro' the milky vessels into the *Ductus Thoracicus*, joyns the Blood in the left Subclavian Vein; and by vertue of fermentation is wrought into the same colour, and consistence.

This Fermentation, which for the most part assimilates the Chyle, springs from the Vital Spirit, and saline principle lodg'd in the Blood; which is enliven'd and reinforc'd by the continu'd supplies of the air received in the Lungs. For the Chyle is carried up to the Subclavian Vein, in order to have a shorter passage into the Lungs, where the mixt composure of Blood and Chyle is dissolv'd, and rarify'd; the acid and urinous Salts are disengag'd, and render'd volatil, which by justling and encountring each the other produce a notable Fermentation; by virtue of which the Sulphureous and Volatil parts joyn together, and are invested with a red colour. Besides, the Chyle is tinctur'd with the Sulphur of the Coler in the Guts, and so predispos'd to a likeness and easie union with the Blood.

This Transformation of the Chyle is not accomplish'd by one single passage thro' the Lungs, but must be compleated by repeated circulations along with the Blood. Which truth is plainly made out by the Chyle or Milky liquor that swims upon Blood drawn forth, four or five hours after eating. So that the mass of Blood consists naturally of Chyle and Blood, which being perfectly mix'd make up an univocal Homogeneous Liquor. 'Tis true, the Ancients speak of four humours, *&c.* as being different Ingredients of the Blood, which they infer'd from the apparent unequal condition of the several parts of Blood drawn forth from the Body; but that is owing only to its corruption, or alteration occasion'd by the Nitrous Salts of the Air. Upon which account all special predictions, grounded on the external appearance of Blood, are frivolous and uncertain.

This regular Fermentation and Assimilation is disordered by the defects of the Chyle, or the Blood. The former may be

cast

cast into three heads. 1. When the Chyle is not sufficiently digested, attenuated, and volatilis'd in the Stomac. 2. When it is not duly tinctur'd with the Oyly Sulphur of the Choler. 3. When the Choleric or Pancreatic Juices are tardy in separating its dregs. The latter into these. 1. When the Motion of the Blood is rais'd beyond its natural pitch. 2. When 'tis depress'd and diminish'd. 3. When its substance is adulterated. The signs by which we descry a disorderly fermentation are the pulse and urine. But they are oft-times fallacious. For the pulse may be immediately influenc'd by the Animal Spirits, without any dependance upon the fermentation of the Blood; and the urine may be disguis'd by drinking, or the disorders of the solid parts imploy'd in that service.

The immediate cause of a disorderly fermentation of the Blood, is the degeneracy of the Urinous and Acid Salts from their due proportion and harmony. The remote causes are; the various Contagious particles convey'd into the Body with the air or any other vehicle; antecedent losses of Blood, disorders of the Bowels, *&c.*

The Cure is perform'd by saline Remedies calculated for the particular indisposition of the Blood, and vary'd according to the difference of Temperaments. Of which more above.

CHAP. I.

Of Fevers in general.

A Fever is a vicious fermentation of the Blood, in which its temperament is deprav'd, and the whole Body disorder'd. The infinite variety of Feverish ferments, occasions a great many various depravations of the Blood. But in general, the formal Essence of all Fevers consists in a preternatural fermentation of the Blood, occasion'd by a foreign ferment, which sometimes immediately affects the Blood, sometimes the Spirits, and sometimes both; at which time Nature endeavours to throw out the heterogeneous particles. In order to make this appear, let us consider the following Remarks.

1. That the eating of Summer Fruits frequently causes Fevers. Now these are endow'd with a notable propensity to ferment. 2. That Cold, or whatever impairs the insensible transpiration, produces the like effect. Now the vicous Salts

Salts thus impriſon'd and overflowing in the Blood, cannot affect it any other way, than by creating a fermentation. 3. That Fevers inſue the inſpiration of contagious particles, which naturally propagate by fermenting. 4. That the rotten Fevers mention'd by the Ancients, are only explicable by the doctrine of fermentations; for no living thing can be properly intitled to putrefaction, unleſs by it be meant a turbulent confus'd motion, proceeding from the diſſolution of contrary Salts; as that of Spirit of Vitriol and Oyl of Turpentin.

The common Symptoms of Fevers are likewiſe vouchers for the fermentation that cauſes 'em. Theſe are commonly reckon'd four, *viz.* 1. An alteration of the pulſe. 2. A chilneſs, ſhivering and ſhaking. 3. Exceſſive heat. 4. The change of Urine, both as to the Liquor and what it contains.

As for the firſt. A preternatural frequency of the pulſe, from an internal cauſe, is accounted by *Silvius* a peculiar and infallible Symptom of a Fever (tho' ſome malignant Fevers ſeem to make an exception to the Rule.) For the moſt part the pulſe is alſo ſwifter. Now theſe effects are plainly reſolvable into the fermentation of the Blood, or the irritation of the Heart and Spirits, occaſion'd by a foreign ferment.

As for the ſecond: a chilneſs, ſhivering and ſhaking differ only gradually. The firſt is only a light Convulſion of the skin, and contraction of the pores, reſembling the ſenſe of cold: tho in the mean while the Body feels hot to the external touch. If the Muſcles are likewiſe affected, it creates a ſhivering, and ſometimes a ſtiffneſs. Theſe effects proceed from a prevalent Acid which twitches the membranous parts, and corrupts the maſs of Blood. In the beginning of intermitting or continual Fevers, theſe Convulſions chiefly affect the internal and noble parts. But after the height of malignant or favourable Fevers they are ſeated for the moſt part in the external Membrans, and portend critical eruptions.

The third Symptom is the immoderate heat of the Body. I call it only a Symptom; for 'tis not eſſential to a Fever, as ſome would have it. For ſome Diſeaſes are attended with a preternatural heat, that are not accompanyed by a Fever, and beſides, there are ſome Fevers that are not hot, but on the contrary notably cold. Tho' this advance may ſound like a paradox, 'tis back'd by *Hippocrates*, *Avicenna*, *Galen*, *Bartholin*, and *Helmont*: Nay, I my ſelf have met with an inſtance

instance of an intermitting Fever that had no hot fits at all; which I cur'd, after the common evcuations, by a mixture of Spirit of Sal-armoniac and Spirit of Scurvy-grass, exhibited in the intermitting days, and a Powder of Tartar vitriolated, or Salt of Wormwood with prepar'd Crabs Eyes, taken some hours before the invasion of the Paroxysm. To return to the preternatural heat which for the most part attends Fevers, 'tis sometimes moist when the fibres of the skin are unbended, and the steams of the humors copiously exhal'd. Sometimes when these fibres are contracted, 'tis dry. If the Acid Salts are not much exalted, 'tis meek and tolerable; but if these sharper Salts abound in the Blood, the heat gives a biting and fiery impression to the external organs of touching.

This preternatural heat springs immediately from the boyling and struggling of the Salts in the mass of Blood. The occasional cause is an Acid, which sometimes infects chiefly the Spirits; and then the heat is remisser, than when it principally affects the Blood. It destroys the established proportion of the Salts, and so gives rise to vicious fermentations. To make good this assertion, namely, that an Acid is the principal author of excessive heat, and consequently of Fevers themselves; it will not be improper to mention the following observations.

1. All wounds and ulcers are offended by Acids, by reason of the inflammation and heat occasion'd by them. And Alcali's perform the cure. 2. Pleurisies, Quinsies, and all inflammations, are still attended by acute hot Fevers. Now they are the product of Acids, and yield only to Alcalin remedies. 3. The same may be said of an *Erysipelas* or St. *Anthony's* fire. 4. Intermitting Fevers spring from an Acid crudity prevailing in the Stomac, and are only cur'd by absorbent Alcali's. 5. Catarrhous Fevers proceed from the Acid sharpness of the Lympha, and are cur'd by volatil temperate Medicines. 6. The Measles and Small-pox are attended with a remarkable heat and Fever before the eruption. Now the prevalency of an Acid in these cases is plainly evinced by the corrosion of the skin, suppuration of the Pimples, and method of cure. 7. Arthritic pains are oft-times ushe'd in by feverish Symptoms. Now their cause is an Acid, and the cure consists in subduing it. 8. The Fevers which follow the stopping of an itch or crusty scab in Children, are the natural offspring of the Acids retain'd in the Body, by means of that suppression. 9. Hectic Fevers always attend purulent internal Ulcers, which partake of acidity. 10. Chil-

dren are often-times seiz'd with Fevers and gripings, by virtue of the corrupt Acid of the Milk. 11. The high colour of the Urine in Fevers must needs proceed from a prevalent Acid; for Alcali's give a contrary Tincture. 12. Immoderate use of Wine produces the same Symptoms as a Fever, by means of its Acid Tartareous parts. 13. Hypochondriac persons are obnoxious to Inflammations, *&c.* by reason of the prevailing Acidity in the first passages. 14. The Heart-burning resembles the Symptoms of a Fever, and is caus'd by a gnawing Acid in the mouth of the Stomac. 15. That according to *Tachenius*, the hot vegitable Remedies are proper against a predominant Acid; and the cold vegetables against an Alcali. The plain truth is this. All hot vegetables have a fat rosinous Acid, which if set at liberty is notably hot; but if they be digested with fix'd Salts, the fat Acid is retain'd by the fix'd Salt, and then they yield a thin meagre Spirit, of noted excellency in hot Diseases; as I have often experienc'd by the simple Spirit of Sal-armoniac. 16. That the pain and heat remaining after burning, proceeds from the keen Acid particles shot into the part; and is remov'd by Alcali's.

Some derive the excessive heat attending Fevers from the Bile; but several Med'cines near ally'd to the Choler expel the heat; and besides, its Patrons cannot determine whether it should proceed from its Acid or Alcali, since 'tis equally intitled to the possession of both.

The fourth Symptom is the alteration of Urine. When the Chyle or Blood is viciated, Nature indeavours to discharge the Heterogeneous particles by this passage; which accordingly impart to the Urine a high or flat tincture, according to the degree of the peccant Acid; which is equally the cause of this and all other Symptoms attending Fevers.

The immediate subject of Fevers is the Blood and Spirits. The alteration of Pulse and Urine clearly infers that the blood is affected; the critical Sweats, the Jaundice, and sometimes the Acid tincture of the Blood ensuing Fevers, are plain demonstrations of the same truth. The Feverish tendency of Aches, the efficacy of Opium in appeasing febrile commotions, and the nature of some malignant Fevers that produce no notable alteration in the Blood and Urine, make it to appear, that the discomposure of the Spirits is properly call'd a Fever,

From whence I infer, that heat or chilness are not essential to a Fever; and that the Heart, or any other solid part, are not the immediate subject. 'Tis true, the febrile source may

may lodge in some corrupt or vitiated part, but it only causes a Fever by disordering the Blood and Spirits. This remote cause of Fevers ought to be heedfully distinguished from their effects of the same nature; namely, when in their declination any solid part is seized with a Swelling, obstruction, *&c.* according to the various disposition of the febrile matter, and the previous infirmity of the part.

The various divisions of Fevers may be gathered from the following Chapters. As for their causes; whatever abolishes the natural proportion and Symmetry of the Salts, causes a preternatural fermentation, and is called a febrile ferment. If it affect the Blood immediately, the Spirits receive its influence at second hand; and if the Spirits are first attack'd the Blood is disordered by them.

This ferment must be somewhat disagreeable to our natural ferments, else it cannot cause a Fever. Such as are the particles retained by stopping the insensible transpiration, the Ferment proceeding from Ulcers, Inflammations, Contagion or Acid Lymph, striking inwards a Scab or Itch, eating Summer Fruits, *&c.*

If this ferment be ingendred within the Body, it often-times proceeds from the long stay of Victuals in the Stomac, which by delay and want of digestion become naked Acids, or viscid Bodies inclosing an Acid within 'em; upon which account we derive the cause of intermitting Fevers from the Stomac; and for so much as their Paroxysms are but so many continual Fevers, most of this sort acknowledge the same original. When the Blood and Humors are forc'd out of their respective Vessels by Wounds and Ulcers, they ferment and occasion a Feverish disorder in the Blood or Spirits.

This ferment approaches to an Acid, both in favourable and malignant Fevers; but with this difference; that a malignant ferment is sharper and more volatil and penetrating than the other; and is frequently couch'd under covert of other minute particles; as in Spring the exhalations of fermenting Plants; in Summer the Alcalin Effluviums in the Air; in Autumn and Winter, the Acid Salt which then prevails.

The steams of rotten Carkasses, and the unfavourable aspects of the Stars may occasion the like malignity. These particles tho' originally included in a narrow compass, multiply by fermentation, and spin out the Disease. The alteration occasioned by them in the Blood, is perfectly

parallel to that of Urine, which is brought into fermentation by the jarring of its Salts, by vertue of which it precipitates its disproportionable parts, and then returns to a pacific state. Even so, the preternatural fermentation of the Blood, is caus'd by the disproportion of its Salts; and moves it to cast forth the superfluous and offending parts by the passages of Urine, Sweat, *&c.* Tho' in this critical evacuation, not only the first morbific matter, but the laudable parts of the Blood and Chyle, that the fermentation had melted down into a saline form, and render'd insociable, are equally discharg'd.

The remote causes are various. The obstruction of the pores of the skin, and excessive drinking or eating, are natural inlets to a Fever. The passions of the mind, especially fear, are generally arragined as causes of malignant Fevers; but 'tis not imaginable how they should produce such an effect of themselves. 'Tis true indeed, fear, and other passions, may depress or disorder the Spirits, and so procure an easie admission to the Airy ferment, that was unable to storm them in their natural order.

The Symptoms are accounted for above; to which we may add the vicious increase, or diminution, or depravation of the Appetite; head-achs, swoonings, *&c.*

The general Prognostics are deriv'd from the Pulse and Urine. A vehement, large, equal pulse is a sign of strength; a small unfrequent pulse betokens weakness: A hard pulse bespeaks the inflammation or distention of some membranous part; as in Pleurisies, and malignant Fevers, affecting the Spirits and Nerves: A soft Pulse discovers that the Spirits are not much disordered; and if it be large and vehement, withal, forebodes sweating.

Urine affords the signs of crudity or concoction. If clear Urine become muddy or contain a Cloud or Sediment, 'tis a sign of concoction, and portends a happy solution of the Disease: for by concoction we understand the separation or precipitation of the peccant Salts from the mass of Blood, and by crudity the perturbation of the Blood arising from these Salts. Now, in the beginning of Acute Diseases the Urine is clear and unmuddy'd, by reason that the Salts are yet reigning in the Blood; but in the increase of the Disease it becomes thick and troubled, and at the height precipitates a copious sediment. If the Urine continue muddy, and does not clarify by standing, 'tis a sign that the commotion and confusion of the Blood does not

yet

yet abate: Nature does not evacuate the offending matter before a ſufficient concoction; and in imitation of her example, Art ought not to attempt any evacuation in benign Fevers, before the ſigns of concoction appear. In malignant Fevers indeed, 'tis not ſafe to wait for 'em; but to indeavour an early precipitation by proper remedies. Clear and ſound-like Urine is a ſign that the animal Spirits are principally affected, and is attended by malignity: but concocted Urine, if it continue ſuch, is a certain preſage of recovery. If after an apparent concoction, it become crude or thin again, 'tis a fatal Omen.

This gradual concoction is the effect of Nature indeavouring a Criſis. Accordingly, we find that immediately before the Criſis, Nature ſtruggles moſt, and the Sickneſs is at its greateſt height, in which caſe it ought not to be diſturb'd by artificial adminiſtrations, but the natural tendency of the morbific matter muſt be heedfully obſerved; for ſometimes 'tis caſt forth by Sweat, ſometimes by Urine, ſometimes by Bleeding, and at other times is thrown upon ſeveral parts of the Body by way of Swellings and Impoſthumes; or is gather'd under the skin all over the Body, and tinges it with a yellow colour, which we call the Jaundice, and is a ſign of health, if it happen on the fifth or ſeventh day; but if it commence ſooner, unleſs attended by ſome notable evacuation, 'tis oft-times fatal. But of all fatal ſigns that of the Patients rubbing and picking the noſe, without any efflux of matter, is the moſt diſmal.

As touching the method of cure: 'Tis neceſſary to diſtinguiſh malignant Fevers which ſuddenly weaken the Perſon, and generally determine in ſome notable evacuations; from thoſe that are benign and favourable, in which we either leave all to nature, as the ancients did, or anticipate her efforts by enervating and correcting the febrile ferment with Artificial remedies, and ſo aſcribe the whole cure to Art.

Sometimes we joyn iſſue with Nature, and while ſhe performs her work, are only buſy'd in removing the impediments that imbarraſs her, by cleanſing the firſt paſſages, emptying the Blood veſſels, and promoting the precipitation of the morbific matter by Med'cines proper for that purpoſe. Indeed when Nature departs from her due meaſures, by indeavouring unſeaſonable evacuations, as in the beginning of a Fever, while the Urine is yet crude, attended by a violent Looſeneſs, Bleeding, *&c.* 'tis a perplexed caſe; for to withſtand Nature, and ſtop the Looſeneſs, *&c.* were to augment the Fe-

ver; and to ſuffer it to go on, weakens and diſables the Patient, ſo that he cannot encounter the Diſeaſe. In order to ſolve this difficult knot, let us conſider in the firſt place, that Nature is forced to theſe evacuations, by the ſharpneſs of the humors, which ought to be corrected by temperate Medicines; in the next place, that if they exceed in quantity, they may be ſafely curb'd; or if deficient in quantity, may be gently encourag'd. If the quality of the matter be faulty, that is, if ſuch things are evacuated as ought not to be, 'tis allowable to ſtop it, according to *Hipp. Sect.* 2. *Aph.* 2. If both quantity and quality be faultleſs, and the evacuation charg'd with no crime, but that of its being ill tim'd, it may nevertheleſs prove critical.

Blood-letting is frequently injoyn'd in Fevers, but oft-times it doe's more harm than good. The general plea for it, is, that it ventilates and cools the Blood; whereas on the contrary, the more ſpace be given to the Blood to boyl in, the higer it boyls. In intermitting Fevers, I poſitively aver, that 'tis noxious; in malignant Fevers 'tis next door to cutting the Patients Throat. And as touching the continual burning Fevers, it ought to be very cautiouſly gone about, by reaſon of a latent malignity that oft-times attends them. If the Patient be plethoric, young and luſty, if a Vomit could not conveniently be exhibited in the beginning of the Fever, if any wonted evacuation of Blood beſtop'd, and ſuch other circumſtances indicate Blood-letting, 'tis well: But however it be, 'tis never ſafe after the third or fourth day.

As for evacuating remedies *Hippocrates*'s Aphoriſm is a ſtanding rule; namely, that *Concocted, not crude humors, ought to be evacuated.* So proper Purgatives are inconvenient till after the height of the diſtemper. Indeed gentle lenitives that do not reach further than the firſt ways, may be mixd with digeſtive Salts, and exhibited in the beginning, or progreſs, avoiding the time of the Criſis. Vomits are proper in all kinds of Fevers, eſpecially if there be any inclination to Vomit, ſour belchings, murmuring noiſe in the Guts, Head-ach or Giddineſs. They ought to be adminiſtred only in the beginning of acute Fevers. In the progreſs of ſlow Fevers they may likewiſe be given.

Clyſters are proper for mitigating the heat, and redreſſing the diſorders of the Head and Guts. But upon the point of critical evacuations or eruptions, they are altogether improper.

Sweatin

Sweating Medicines are authoriz'd by Nature's Example. They ought to be frequently repeated, and that not only after signs of concoction, but during the whole course of the Disease, especially if it be malignant. Such of 'em as are sharp, aromatic, rosinous, oyly, or hot, are to be avoided; and those which are temperate, as the fix'd absorbents, and the thin volatils are only proper for this purpose. If sweat do not easily insue, add Oprats to them. Which are never to be us'd without a sudorific mixture, nor about the time of the Crisis, nor in the very first beginning of the Disease.

In Fevers Sugar and sweet things ought to be avoided, by reason that they promote the fermentation. Thirst generally attends Fevers, and proceeds from the deficiency of Spittle, and from Alcalin Salts lodg'd in the Palate. 'Tis a vulgar error to derive it from heat; for a few drops of Spirit of Sulphur are more efficacious in quenching it, than a whole Gallon of Water or cooling Liquors. Wine is likewise of noted efficacy for quenching Thirst, corroborating the Stomac and Spirits, and promoting Urine. But it ought to be of a sharp thin Body; for the sweet fat Wines from *Spain*, *Florence*, &c. are hurtful. *Hippocrates* was wont to exhibit Wine in all Fevers; at least in intermitting and malignant Fevers 'tis of sovereign use. In continual burning Fevers what disorders it may occasion are presently visible, and yield to absorbent Powders; for 'tis not the hot Spirit, but the Acid of the Wine that can do the least harm; nor that neither, but only in some particular constitutions.

Ale or Beer is not agreeable to Feverish Persons, because the digestive faculty of the Stomac being languid, it corrupts and causes bitter musty belchings. Waters and thin Liquors mix'd with Acids are preferable. As,

Take of the flowers of red Roses, two handfuls; extract a Tincture from them with Water sharpened with Spirit of Sulphur; then add the Syrup of the Juice of Citrons, or of Barberries, or of Rasberries, and make a Julep. Or,

Take three Citrons slic'd, and throw upon 'em white Sugar. Then boyl them in common Water. Take of this Liquor strain'd a Pound and half, fresh juice of Citrons three Ounces; flowers of Roses and of red Poppies, of each a handful; with a small quantity of dulcify'd Spirit of Salt. Let them stand in a warm infusion, in order to extract a Tincture.

In continual Fevers let the Patient drink at pleasure: But the Liquor must not be cold, nor much of it drunk at

once. In intermitting Fevers these Acid potions, ought not to be administred till after the cold fit. The Spirit of Sulphur with common Water is a proper Liquor both for quenching thirst and promoting sweat. Or,

Take of Whey two pound, Citron Juice three ounces; Dasies and red Poppy flowers, of each an ounce and a half. Boyl in a close Vessel till the Tincture be extracted. The Citron Juice depurates the Whey. It is useful in all continual Fevers, and qualifies Scorbutic or Hypochondriac Salts.

As for Diet. They ought to avoid Meat, Fishes, and Summer Fruits. In a word, let them eat but a little, and as their Appetite requires. What they eat must be thin and watry, but never forc'd upon 'em. Broth, Panado's, a toast in Wine, or at most potch'd Eggs are their proper food.

Quiet and rest are good signs; and sleep, if it be not preternatural, composes the Spirits and procures Sweat.

CHAP. II.

Of Intermitting Fevers.

A Fever is styl'd Intermitting, when the fermentation, and agitation of the Blood and Spirits is interrupted, and after a certain interval of time revives again. If it return with equal force every day, 'tis call'd Quotidian: If it return every other day, leaving an interval of one intire day, 'tis a Tertian: if the interval consist of two days, 'tis a Quartan. Some return after three days, some after four, five, *&c.* Some every Week, some every Month, and some every Year; but these are very unfrequent.

If the fit return twice or thrice in one day, 'tis call'd a double or treble Quotidian. If two Paroxysms happen every other day, or if the intermitting days of Tertians have likewise Paroxysms corresponding to one another, 'tis a double Tertion; If two fits come in the fit days, and but one in the intermitting, 'tis a treble Tertian. If the fits return every day, so as that the first for duration and other Symptoms is parallel to the fourth, the second to the fifth, third to the sixth, *&c.* 'tis a treble Quartan. If the Fever intermit only every third day, 'tis a double Quartan.

'Tis a hard matter to distinguish Quotidians from double Tertians. These last are known by this, that either the Paroxysms

roxysms have an alternate correspondence, the first to the third, second to the fourth, *&c.* Or the intervening Paroxysm comes later, while the other two observe their set Periods; or in Progress of time it intirely disappears, and two fits recur every other day. A precedent or succeeding simple Tertian, discovers likewise a double Tertian. So that true Quotidians are very rare, and some are so hardy as to deny that there are any such. But several good Authors have vouch'd for the affirmative.

There are some erratic intermitting Fevers, that observe dark periods peculiar to themselves; and some call'd wandring, which have no set times at all.

The grand Symptoms of intermitting Fevers are a chilness, shivering, and shaking, follow'd by heat; and that by plentiful Sweats. Before the invasion of the Paroxysm, the Patient is molested with a yawning and stretching; a weariness of the Joynts, and unquietness or tossing in Bed. The Nails become livid and blew; a gentle chillness seizes the Loyns and Back, afterwards it creeps to the Belly, and by degrees overspreads the whole Body, especially the extreme parts. Then follows a shivering, and sometimes a violent concussion of all the parts of the Body. During the cold fit, several sorts of pains affect the Joints, the Guts are grip'd, and make a murmuring noise; and the Pulse is rendered more frequent, but withal weaker and lesser, nay scarce perceivable.

When the coldness abates, a difficulty of breathing insues with a notable heat and thirst; the Pulse is strengthened and inlarg'd. (If the Pulse be small, 'tis a sign of great malignity.) The Tongue becomes dry, the Neck and Temples are seized with a beating heat, attended with frequent respiration, head-ach, watching and sometimes doating. The heat declining is follow'd by sweating and voiding Urine. After which sleep takes place, and the Symptoms disappear. In Tertians the heat and thirst are greatest. And in Quartans, the cold, shaking, and weariness of the Joynts are most troublesome.

This is the ordinary manner of invasion. But withal, there are some irregular Fevers, that depart from this method. As the cold Fevers that have no hot fits; and the hot Tertian Fevers that are not usher'd in by cold. Sometimes but very rarely, the order is inverted, and the heat preceeds the cold fit. Oft-times these Fevers begin regularly, and afterwards

terwards degenerate; or on the contrary, begin in a diſorderly manner, and by continuation become regular.

If the Pulſe be very ſmall, the ſtrength aboliſh'd, the Breaſt diſturb'd, the Spirits diſquieted in the beginning of the Paroxyſm, and afterwards Puſhes and Spots appear in the Skin, the Fever is malignant and very dangerous. Tho ſome are inclin'd to exclude malignity from the whole circle of intermitting Fevers.

Tho' intermitting Fevers may differ in their Periods, and ſome occaſional Symptoms, they all proceed from one and the ſame cauſe, and require the ſame method of Cure; as appears by their frequent Permutation. The general efficient cauſe of all motion is the Spirits; but the occaſional material cauſe which provokes them to ſuch irregular motions, is a vicious Acid ferment bred in the Stomac and firſt paſſages, by the depravation or weakneſs of the digeſtive Faculty. This Opinion is juſtified by the preternatural Appetite that ſometimes attends Fevers, the frequent Cures perform'd by Faſting, by exceſſive Drinking and Vomiting, or by eating greedily what was long'd for; and the notable exaſperation or relapſe of the Diſeaſe occaſioned by any error in Diet, or eating unacceptable Food. 'Tis true, ſuch Fevers may ſometimes proceed from the Air, or quality of the Food; but very rarely. The diſorders of the Spleen and Liver do frequently attend Quartans and Tertians, but they are rather their effects than cauſes; or perhaps they may remotely indiſpoſe the Body, and render the Paroxyſms more obſtinate. The ſuppreſſion of the Terms, or obſtruction of any part, may produce the like effects: but ſtill the immediate cauſe is lodg'd in the Stomac, or firſt Paſſages, which inſinuates it ſelf into the remains of indigeſted Food, and ſo multiplies the cauſe of repeated Paroxyſms.

Now by means of this Acid, all the Symptoms and Periods of Paroxyſms, are thus accounted for. If the Chyle be not well digeſted in the Stomac, and duly ſeparated from the groſſer parts, by the interpoſal of the Pancreatic and Choleric Juices in the Guts, it degenerates from its temperate, volatil, ſaline Quality, and becomes Acid or Viſcid; and accordingly when it joyns the Blood, fixes its ſaline volatil oyly Particles, and thickens the whole Maſs. Thus its fermentation is impair'd, and by conſequence the Pulſe is weaken'd and diminiſh'd, but withal, render'd more frequent by the irritation of the heart. The heat of the Body is extinguiſh'd, and the Spirits diſorder'd by the indiſpoſition and vicious

vicious fermentatoin of the Blood, from whence iſſues the wearineſs of the Joints. When this Acid begins to exert it ſelf, it twitches and contracts the nervous and membranous parts, the coats of the Guts and Stomac, with the annex'd Choleric and Pancreatic Veſſels, the fat Membrane or Panniculus Carnoſus, *&c.* the natural conſequences of which are a ſhivering, ſhaking, pains of the Joints, and violent Vomiting of white or green matter, which is nothing elſe but a mixture of the Pancreatic and Bilious Juices, perverted by this irregular fermentation, and cauſing gripings of the Guts, a coldneſs of the Belly, and many other Symptoms.

Theſe Symptoms are allotted only to the beginning of the Paroxyſm. For after that this Acid has for ſome time ſtifled the volatil oyly parts of the Blood, they make head againſt it, and the mutual encounter creates a notable effervescency, which ends in diſcharging the vanquiſh'd Acid in a vehicle of attenuated Serum by Urine or Sweat. From hence we deduce the other Symptoms of heat, burning, the vehemency and largeneſs of the Pulſe, plentiful Sweats, the clearneſs of the Urine at firſt, and its ſubſequent muddineſs. The Acid being thus ſubdu'd and evacuated, the Fever and concurring Symptoms intermit, till ſuch time as the remaining Miaſma's be provok'd afreſh, or ſupplied by new recuits from the Stomac.

If this intermitting ferment be cramp'd by a viſcid pituitous Vehicle, the Paroxyſm is longer, and the Symptoms meeker, than when it is maſter of it ſelf, and at liberty to diſplay its utmoſt energy. From whence we gather the difference of acute and chronical, ſpurious and regular Fevers.

In theſe Northern Countries, 'tis highly neceſſary to take a particular notice of Scorbutic and Hypocondriac Diſeaſes, as the frequent Companions of intermitting Fevers. Thoſe which we call Erratic are always Scorbutic, unleſs they be caus'd by Impoſthumes of the internal parts, which ſeldom happen. The ſigns of a Scorbutic Fever are, anxieties of the Breaſt, rending pains of the Joints, floating pains or convulſions of the lower Belly (either before or in the Paroxyſm) vomitting of green or yellow Matter, and the eruption of livid or red ſpots towards the end of the Fit; which ſometimes break forth together with the Sweat, and diſappear when it is finiſh'd. But the moſt infallible evidence of a Scorbutic Fever is, when red crumbling clots of ſand ſtick to the bottom or ſides of the Chamber-pot; or in room of that a fat cruſt, or a groſs, reddiſh, ſcurfy ſediment appears in the Urine.

Peri-

Periodical Fevers degenerate oft-times from their regular measures, and either anticipate or postpone the hour of returning. This may be occasioned by the strength or weakness of the Spirits, the greater or less activity of the febrile ferment, or viscidity of its vehicle.

As for their frequent multiplication, or the degeneracy of simple Fevers into double, triple, quadruple, *&c.* 'tis occasioned either by a preposterous use of fixing Medicines, Opiats or Purgatives; or by eating Fish, Summer-fruits, Milks, and over-feeding just before the Paroxysm.

The Diagnosticks are couch'd in the preceding Paragraphs. As for Prognosticks; a Tertian if regular and well manag'd, do's not exceed seven fits; but a Quartan, tho' more tedious, is less dangerous. Malignant intermitting Fevers are justly suspected. The spurious Tertians, or such as begin meekly and slowly, are worse to cure than the regular acute ones; and for the most part drive out the fourteenth Paroxysm. All benign intermitting Fevers are easily cur'd, if taken care of betimes; but if neglected, they become chronical, and degenerate into grievous distempers. If the Urine, voided out of the Paroxysm, thicken apace, it signifies the shortness of the Disease. If at first it appear crude, and soon after assume a white Cloud, the Fever will end with the fourth Paroxysm. But if it continue scanty, reddish and unconcocted, the Fever will last to the seventh fit; or, if discontinued, is apt to relapse. If all the Symptoms are heightened in the second Paroxysm of a Tertian, and relent in the third, the fourth concludes the Fever; but if their heighth be put off till the fourth, and their remission to the fifth, the seventh is the finishing stroak. While a Tertian anticipates its hours it increases; and declines when it begins to postpone. Schirrus's in the Bowels succeeding to intermitting Fevers, are sad presages of chronical distempers. Such Fevers as observe regular constant periods, are more obstinate than those which vary. Vomiting is a good sign; and Convulsions in the fit are not to be fear'd. When a copious Sweat succeeds to the Paroxysm, oft-times there's no sediment in the Urine; and in that case there's no bad indication; but if otherwise, 'tis justly suspicious.

As for Quotidians, they are apt to continue forty days or longer. If attended by a heaviness of the Head and drowsiness, they terminate in a Lethargy or Carus. If they are spun out to a considerable length, they degenerate into Dropsies, and other grievous distempers. If the Paroxysms in-

vade

vade by day, 'tis a worse case than if they came by night; and if they continue long without Sweating, while the Appetite and strength of the Person are very languid, there's small hope of recovery, If the Paroxysms be short, attended by Vomiting in the beginning, and early signs of concoction in the progress of the Disease, 'tis a good Omen. Sometimes Quotidians are solved by frequent Vomiting, pituitous evacuations by Stool, or a translation of the febrile matter to the Joints.

A Quartan after the sixtieth year of one's Age is mortal. It may continue for two and twenty years together, but the utmost measure of its regular duration is one year. If its Periods be constant and regular, they portend ill; if inconstant they betoken a sudden recovery. An Autumnal Quartan continues till the Spring Equinox, and then for the most part ceases of its own accord. A Vernal Quartan, if it do not disappear at the Summer Solstice, reaches to the Autumnal Equinox. The duration of Autumnal and Winter Quartans is longer than that of the Summer ones. Women are oft-times freed from this Fever, by being got with Child. If it be attended by the disorder of any Bowel, it introduces a Dropsy or obstinate Scurvy. If it dwell long in a dry Constitution, it ends in a Hectic or Consumption. An irregular Diet, especially in respect of drinking, adds to its duration. Loss of Appetite is a very bad sign. Black Urine, tho' a dangerous Symptom in other Diseases, signifies the solution of a Quartan, unless it be attended by a notable weakness, for then it is a sign of approaching Death.

A Jaundice in the beginning of a Tertian or Quartan, is an unlucky Symptom; but if it happen later, may infer a solution of the Disease. Tertians are sometimes cured by critical eruptions in the Lips, Nostrils, *&c.* and sometimes by long fasting; but the most effectual way is that of sweating.

Now in order to answer all the indications of cure, let the following cautions be carefully weighed.

I. That by all means the cure be commenc'd betimes, for intermitting Fevers by delay become obstinate.

II. In these Countries, Blood-letting does but prolong 'em. Perhaps some occasional circumstances may justify the use of it in a few particular cases; but in general, this is an uncontested Maxim, that whatever impairs the heat, or does not promote Sweating, is hurtful.

III. Vomiting is absolutely necessary in all intermitting Fevers, especially Quartans; and ought to be repeated as occasion

caſion requires. Let a Vomit therefore be exhibited two or three hours before the invaſion of the Paroxyſm, unleſs the weakneſs of the Perſon diſſwade; in which caſe, give it the day immediately preceding. The Symptomatical Vomitings that oftentimes happen in the Paroxyſm, are ſo far from arguing againſt Artificial Vomits, that they are a plain Indication for 'em. If the Perſon be troubled with a bitter nauſeating taſte in the mouth in a morning, or complain of ſtraitneſs of the Breaſt, Heart-burnings, Unquietneſs, Giddineſs, Belchings, *&c.* a Vomit is loudly demanded. In fine, in Quotidians, and all other intermitting Fevers, it is a ſovereign Remedy; but withal, care muſt be taken, that the Stomac be not over-weaken'd; upon which account, let the following mixture be given after the operation of the Vomit.

Take of Rasberry-Water, one ounce; ſtrong Cinnamon-Water, two drams; Confection Alkermes, half a dram; Laudanum Opiatum, one grain; ſimple Syrup of Poppies, two or three drams. Mix for the abovemention'd uſe.

Aſarabecca is a noted Vomit, eſpecially in Quartans. A dram or four ſcruples of the Powder of Aſarabecca Roots may be given, with eight or ten grains of Sal-armoniac, in a draught of White-wine, an hour or two before the Paroxyſm; it procures both vomiting and ſweating. Or eight or nine leaves, cut not very ſmall, may be infus'd overnight in Carduus Benedictus Water, and exhibited in the morning with Oxymel. If the leaves be beat in a Mortar 'till their Juice be expreſs'd, and that mix'd with Oxymel and Water of Carduus Benedictus, they yield a more powerful Vomit. If the leaves be boil'd in Water, they're ſtrip'd of the vomiting vertue, and become Diuretic, but withal are highly uſeful in Quartan Fevers. The Water of Tobacco, and the decoction of Swallow-wort roots in Wine and Water, are likewiſe approv'd Vomits in theſe caſes.

But of all the vomiting Tribe, Antimonials are the beſt: as the Infuſion of Crocus Metallorum; or take of Mercurius Vitæ, five or ſix grains; infuſe in Rheniſh, or Wormwood-Wine for the ſpace of a Night, ſtrain out the Wine, and give an ounce or ten drams for a doſe. Or,

Take of *Mynſicthius* his Emetic Tartar, two or three grains, Sal-armoniac, twelve or fifteen grains; mix and exhibit in a warm Vehicle.

Sala's Emetic Syrup may be given in any convenient Vehicle, from three to ſix drams. Salt of Vitriol is very offenſive

fensive to the Stomac. The pairings of Man's nails is a Horse-Vomit.

IV. All Purgations in the beginning of intermitting Fevers, or while the Urine is yet crude, are hurtful; nay, in the height of the Distemper, when the Urine begins to appear muddy, fierce Purgatives may do a great deal of mischief. If Vomits do not succeed, or the first passages be stuff'd with humors, gentle Purgatives may be exhibited after the third or fourth Paroxysm, either on the intermitting day, or the Fit day, so as that the operation may be finish'd before the invasion of the Fit. As,

Take of Tartar vitriolated, twelve or fifteen grains; Scammony sulphurated, three grains; Troches Alhandal, two grains; distill'd Oyl of Aniseeds or of Cloves, two drops. Mix for a gentle purging Powder.

Take of Powder of Jalap, fifteen grains; Scammony sulphurated, three grains; depurated Nitre, four grains; Salt of Tartar, two grains. Make a Powder.

If Infusions be more acceptable; take of pick'd Senna, three or four drams; Aniseeds bruis'd, a dram; Salt of Tartar, half a dram. Infuse for the space of one night, in a sufficient quantity of Carduus Benedictus Water. To three ounces of the strain'd Liquor, add Cinnamon-Water, and Syrup of Apples, of each half an Ounce. Mix for a Potion. It tastes prettily, and purges very gently. In Tertians, the Dose of the Senna is lessen'd, and Rhubarb added.

Take of pick'd Senna an ounce; crude Roots of Black Hellebor, two drams; of Polypody of the Oak, three drams; Salt of Tartar, half a dram; boil them gently in clarifi'd Whey. To four ounces of the strain'd Liquor, add Tincture of Tartar, a scruple; compound Syrup of Fumitory, half an ounce. Mix as above.

Take of pick'd Senna, an ounce; crude black Hellebor and Ginger, of each two drams; of the sharpest Salt of Tartar, half a dram; tie them into a bag, which infuse in warm Water in a close Vessel. Let it stand 'till it cool, and reserve the Infusion in a Cellar for use; of which, let the Patient take a large draught every fit day, about two hours before the Paroxysm, and likewise in the intermitting days, especially in Quartans.

Take of Wormwood-tops, half a handful; Flowers of lesser Centory, two little handfuls; choice Rhubarb, two drams; black Hellebor Roots, a dram; Cinnamon, Salt of Tartar, of each a scruple. Infuse them in Fumitory Wa-

ter,

ter; for the ſpace of a night, in a warm place. To three ounces of the ſtrain'd Liquor, add ſolutive Syrup of Roſes, three drams. Mix for one Doſes.

Take of Mint-water, an ounce; Cinnamon water, half a dram; Gum Ammoniac diſſolv'd in Vinegar, ſixteen or twenty grains; Tartar vitriolated, ſeven or ten grains; Scammony ſulphurated, three grains; Extract of Troches Alhandal, half a grain, or a whole grain; ſolutive Syrup of Roſes or of Apples, two drams. Mix, &c.

If Pills be more agreeable, take fifteen grains, or a ſcruple of the Extract call'd Catholicum, or of *Crollius*'s Extractum Panchymagogum. Or,

Take of *Quercetanus* his Pills of Ammoniac, or of his Tartar Pills, fifteen or twenty grains; Extract of Wormwood, ſix grains; Scammony ſulphurated, two grains; make Pills. Or,

Take of *Crollius*'s Extractum Panchymagogum, fifteen grains; Extract of Steel, prepar'd with Juice of Apples, twelve grains; Tartar vitriolated, ſix grains; Scammony ſulphurated, three grains. With Eſſence of Steel make Pills.

Take of ſweet Mercury, fifteen grains; Tartar vitriolated, half a ſcruple; Scammony ſulphurated, three grains. With conſerve of Roſes, make a Bolus.

Sweet Mercury attenuates the viſcid Humors. Scammony purges the ſharp and bilious Humors. In obſtinate Quartans ſweet Mercury mix'd with Mercurius vitæ, or Butyrum Antimony, given in ſubſtance, are very effectual. As likewiſe the following Powders taken before the Paroxyſm.

Take of white Mechoacan, two drams; white Pepper-corns, in number one and twenty; prepar'd Crabs-Eyes, one ounce. Make a Powder for three Doſes.

Take of Arcanum Duplicatum, half a ſcruple; diaphoretic Antimony, five grains; prepar'd red Coral, three grains; Powder of Jalap, ſix grains; Scammony ſulphurated, two grains. Make a Powder.

V. Carminative and Abſtergent Clyſters are very uſeful, eſpecially when Wind or a murmuring noiſe moleſts the Guts; when grievous pains invade the region of the Loins, proceeding from the Meſentery; when a vomitting, anxiety and ſtraitneſs of the Breaſt afflict the Patient; or when gnawing ſharp Humours are crouded into the Stomac, while its Mouth is ſtubborn, and not eaſily mov'd to vomitting, as in Hypocondriac, and the like caſes. In Scorbutic Fevers, attended

tended by convulsive pains of the Belly or Loyns, those made of Milk, Sugar, Hony, and the yelk of an Egg, are very useful. In Hypochondriac and Hysteric Fevers, the same Clysters are given, or mix'd with Turpentine. The carminative and gentle absterstive Clysters are as follows.

Take of the carminative and emollient Ingredients of each a handful; Salt of Pot-ashes, two or three drams; Dross of Regulus Antimonii, a dram: Boyl in a sufficient quantity of Water. To eight ounces of the strain'd Liquor add Electuary of Bay-berries, one ounce; distill'd Oyl of Turpentine, a scruple. Or,

Take of Chamomil flowers, two handfuls; Juniper-berries, one ounce; Aniseeds half an ounce; boyl them in equal quantities of Water and Humane Urine. To eight ounces of the decoction strain'd, add of lenitive Electuary, one ounce; distill'd Oyl of Juniper-berries, a scruple. Make a Clyster.

Take of the leaves of Wormwood and Carduus Benedictus, of each a handful; Roots of Elecampane, one Ounce; Lovage Roots, six drams; Juniper-berries, one ounce; Salt of Tartar a dram; boyl them in Whey. And to eight ounces of the strain'd Decoction, add Electuary of Hiera with Agaric, one ounce; Hony of Roses, six drams; Sal Gem, a dram and a half. Mix for a Clyster.

Take of Chamomil flowers, two handfuls; Mint, one handful; Juniper-berries an ounce; boyl them in Water and Humane Urine, and inject the warm Decoction.

In scorbutic Fevers the Clysters must be compos'd of Milk; as, take of Goats or Cows Milk, from nine ounces to a pound; Hony of Roses, Hony of Rue, of each an ounce, or an ounce and a half: and two yelks of Eggs. Make a Clyster, for two Injections. This and all other Clysters ought always to be injected about an hour or two before the Paroxysm.

VI. These general evacuations can never compass the cure, unless followed by Diaphoretics. 'Tis true, sweating Medicines ought not to be exhibited till after Vomiting, *&c.* But the Fever is not rightly cur'd, if they be totally omitted, or sweats do not insue. 'Tis true, hot sharp Aromatics are justly avoided, but the saline Febrifuga's must not be neglected.

VII. The sick Person must take care to have an empty Stomac, when the fit comes.

VIII. Diaphoretic Medicines are not to be given in the Paroxyſm, but an hour or two before it, in order to promote ſweating in the end of the fit; for if that be wanting the Perſon is ſeized with the Head-ach. But withal, 'tis an improper way to procure ſweat by a heavy load of coverings.

IX. The Phyſician muſt obſerve nicely if a Tertian partakes of malignity. If the Tongue be rough and black, and the Perſon ſeized with a ſudden weakneſs, 'tis a ſhroud evidence of a malignant Tertian. In this caſe Emulſions of Citron ſeeds, with Alexipharmacal Medicines joyn'd to Febrifuga's are proper.

X. Spirit of Sal-armoniac is an infallible comforter either in the cold or hot fit. In Scorbutic Fevers 'tis of ſovereign uſe, if mix'd with Spirit of Scurvy-graſs. It may be given before the Paroxyſm, or on the intermitting day.

Take of Spirit of Sal-armoniac, a dram; Eſſence of Opium fifteen drops. Mix for one Doſe, to be taken immediately before the Paroxyſm.

Take of Spirit of Sal-armoniac, three drams; Spirit of Hartſhorn ſuccinated, a dram; Doſe thirty or forty drops.

Take of Mint Water, one ounce; Spirit of Sal-armoniac, half a dram; Diaphoretic Antimony, a ſcruple; diſtill'd Oyl of Cloves, or of Amber, two drops, Syrup of Orange-peel, two drams, mix for a Potion before the Paroxyſm. If the cold fit be very troubleſome, add a grain of Laudanum Opiatum. In Scorbutic Fevers add Spirit of Scurvy-graſs.

Take of putrify'd Sal-armoniac, a ſcruple; Antihecticum Poterii, twelve or fifteen grains; diſtill'd Oyl of Cloves, two drops, make a Powder, to be taken before the acceſſion of the fit.

Take of Sal-armoniac, fifteen grains; prepar'd Crabs Eyes, half a ſcruple, Laudanum Opiatum, one grain, make a Powder and uſe as above.

Take of Antiſcorbutic Water, and Water of Carduus Benedictus, of each an ounce and a half; Spirit of Scurvy-graſs or Spirit of Sal-armoniac, a dram; prepar'd Crabs Eyes, and *Strobelbergerus* his ſpecific againſt Fevers, of each a ſcruple; Laudanum Opiatum, two grains; *Foreſtus*'s Antiſcorbutic Syrup, an ounce. Mix, *&c.*

XI. When the cold fit is extremely violent, the uſe of Spirit of Sal-armoniac may be confin'd to the intermitting days,

days, and the fixed Alcali Salts exhibited on the fit days. As,

Take of red Coral prepar'd, Salt of Wormwood, of each fifteen grains; Laudanum Opiatum, a grain; distill'd Oyl of Cloves, or of Juniper berries, two drops. Make a Powder to be given in a warm vehicle, about an hour or two before the Paroxysm, in order to procure sweat. Or,

Take of Salt of Wormwood, fifteen grains; volatil Salt of Hartshorn, three grains; prepared red Coral, half a scruple; distill'd Oyl of Cloves, two drops. Make a Powder, *&c.*

Take of Salt of Wormwood, two scruples; prepar'd Crabs Eyes, half a dram. Diaphoretic Antimony, half a scruple. Mix for three Doses, to be exhibited before a Quartan Paroxysm.

Take of red Coral prepar'd, Salt of Wormwood, of each a scruple; fulminating Gold, six grains. Make a Powder.

Take of Hartshorn prepar'd without fire, two scruples; Salt of Carduus Benedictus, Salt of lesser Centory, of each eight grains. Make a Powder for two Doses.

Take of Water of lesser Centory, an ounce or two; Salt of Wormwood, fifteen or twenty grains; prepar'd Crabs Eyes, ten or fifteen grains; Syrup of Carduus Benedictus, half an ounce. Make a Potion to be given before the Paroxysm adding two drops of distill'd Oyl of Cloves.

Take of Parsley Water, two ounces; Fennel Water, one ounce; Spirit of Venice Treacle, a dram and a half; volatil Salt of Amber, a scruple; Syrup of Carduus Benedictus, an ounce. Mix and exhibit a spoonful now and then.

Take of the Water of Carduus Benedictus, two ounces; Treacle Water, two drams: Salt of Wormwood, half a dram; Spirit of Sal-armoniac, a scruple; Syrup of red Poppies, three drams. Mix for a Potion.

XII. The fix'd Salts consisting of an Alcali and an Acid, such as Arcanum Duplicatum, Sal Hypochondriacum digestivum, *&c.* are proper to be us'd in the beginning of the Disease before evacuations; and likewise on the intermitng and fit days. As,

Take of Hypochondriac Salt, half a scruple; Salt of Wormwood, five grains. Mix for a Powder.

Take of purify'd Sal-armoniac, a dram; Antimonial Nitre a scruple. Make a Powder for two Doses, one to be taken in a hot vehicle in a Morning, and the other in a cold vehicle at Night.

Take of Arcanum Duplicatum, fifteen or twenty grains; Diaphoretic Antimony, half a ſcruple. Mix. Let it be taken before the invaſion of the fit, and twice on the intermitting day.

Take of prepar'd Crabs Eyes, Arcanum Duplicatum, Salt of Wormwood, of each half a dram: Volatil Salt of Amber, twelve grains; Laudanum Opiatum, three grains. Make a Powder for three Doſes: One to be taken immediately before the fit; and two on the intermitting day.

Take Ivory prepar'd without fire, Arcanum Duplicatum, of each twelve grains; fulminatory Gold, ſix grains. Or,

Take of Cream of Tartar, a dram; Tartar vitriolated, half a dram; Spirit of Sulphur, three or four drops. Make a Powder for two Doſes.

Riverius recommends *Crollius*'s ſpecific Potion to be taken before the Paroxyſm; *viz.*

Take of Chicory Water, one, two or three ounces; Spirit of Sulphur, or Spirit of Vitriol, fifteen or twenty drops; Salt of Wormwood half a dram. Mix for a Potion.

XIII. When the hot fit is very violent, and the cold one ſhort and inconſiderable, nitrous Salts are very proper. Dulcify'd Spirit of Nitre effectually allays the Fever, after the height of the Paroxyſm. Antimonial Nitre, or Nitre vitriolated, is a ſovereign remedy in Scorbutic Fevers.

Take of Antimonial Nitre, fifteen grains; Sal-armoniac ſix grains. Make a Powder to be adminiſtred before the Paroxyſm.

Take of Antimonial Nitre, half a ſcruple; Arcanum Duplicatum, twenty or thirty grains; *Poterius*'s Antihectic Powder, nine or twelve grains. Mix for three Doſes.

Take of Antimonial Nitre, two ſcruples; Hartſhorn prepar'd without fire, a ſcruple; Diaphoretic Antimony, eight grains. Mix for two Doſes.

Take of Arcanum Duplicatum, fifteen or twenty grains; volatil Salt of Amber, ſix or ten grains. Make a Powder.

XIV. Acids are not very proper in intermitting Fevers. If the Fever approach to a continual, or be attended by an immoderate burning heat, inſufferable thirſt, and a difficulty of ſweating, they may be exhibited; but never before the height of the fit. As,

Take of Rasberry Water, three ounces; Juice of Rasberries, three or ſix drams; Diaphoretic Antimony, half a dram, or a dram; Syrup of the Juice of Citrons, half an ounce, or a whole ounce; dulcify'd Spirit of Nitre as much as ſufficeth

ſufficeth for a grateful acidity, mix. Take a ſpoonful now and then. It quenches thirſt, allays the heat, and promotes ſweating.

Sometimes Crabs Eyes mix'd with Vinegar are uſeful in the fit; as take the Water of Carduus Benedictus, Chicory Water, of each an ounce and a half; Wine Vinegar, ſix drams; ſimple Spirit of Treacle, three or four drams; Powder of Crabs Eyes, half a dram; Syrup of the five opening Roots, an ounce; mix and exhibit a ſpoonful now and then. Or.

Take of Sorrel Water, Fumitory Water, Mint Water, of each an ounce; Rasberry or Elder Vinegar, ſix drams; ſimple Spirit of Treacle, a dram and a half, or two drams; prepar'd Crabs Eyes, two or three ſcruples; Syrup of Orange peel, three drams. Mix and uſe as above. 'Tis uſeful againſt ſtraitneſs of the Breaſt, Gripings, Wind and Hypochondriac Symptoms of the Belly.

Take of Chervil Water, four ounces; Wine Vinegar, ſix drams; prepar'd red Coral, prepar'd Crabs Eyes, of each a dram; Laudanum Opiatum, two grains, Syrup of ground Ivy, half an ounce. Mix, *&c.*

XV. Opiats are of extraordinary uſe. But if unſeaſonably adminiſtred, are very pernicious. Digeſtive and evacuating Medicines muſt always preceed the uſe of Opium. After them it mitigates the cold and ſhivering, and effectually removes ſuch Paroxyſms as return more by cuſtom than the force of the morbific matter. It muſt always be joyn'd to proper ſpecifics. As,

Take of *Mynſicthius*'s Arcanum Duplicatum, a ſcruple; Salt of Wormwood, half a ſcruple; Laudanum Opiatum two grains. Make a Powder to be taken in Wormwood Wine, before the invaſion of the fit.

Take of the febrile Elixir, two drams; Eſſence of Opium, half a dram; Doſe forty or fifty drops.

XVI. If the Paroxyſms does not end in ſweating, headachs follow it. For which Symptom let the head be fomented with ſome hot camphoris'd Liquor.

XVII. In chronical Fevers, Bliſtering Plaiſters applied to the Wriſts or pit of the Neck are very ſerviceable. Mercurial ſalivations ſometimes remove inveterate Quartans; but the cure is worſe than the Diſeaſe. Aguiſh Perſons are very apt to ſalivate, by taking but a few grains of ſweet Mercury; which inconvenience ought to be prevented by purgation or forcible ſweating.

XVIII. Chronical Fevers thicken the Blood and Lymph, and are apt to degenerate into ſlow Hectic Fevers; which are beſt prevented by the uſe of Sal-armoniac a (Vomit being premis'd) or the following Powder, *viz.* Take of Arcanum Duplicatum, twelve or fifteen grains; Ivory prepared without fire, half a ſcruple, mix and exhibit two hours before the fit. Inappetency ſucceeding to ſuch Fevers is cur'd by the continued uſe of Wormwood or leſſer Centory.

XIX. Chronical Fevers, and ſuch as are cur'd by repeated Doſes of abſorbent Powders, are frequently follow'd by Colics, Dropſies, ſwellings of the feet, *&c.* Such Symptoms are obviated or remov'd by the internal uſe of the Decoction, Eſſence, Juice or extract of Wormwood, and the external application of Celandin the greater.

XX. In the declination of an intermitting Fever, or after their removal, or on the intermitting days, 'tis not improper to obviate the cachectic indiſpoſitions that generally follow 'em, by the uſe of the following vegetable Febrifuga's, which ſharpen the Bile, enervate the Acid, and fortify the Stomac.

Take of Eſſence of Wormwood, or of leſſer Centory, or of Gentian, or of Myrrh, half an ounce; Spirit of Sal-armoniac, two drams. Mix. Doſe thirty or forty drops twice a day.

Take of *Michael*'s febrile Elixir, and Elixir Proprietatis, of each a dram and a half. Mix. Doſe forty or fifty drops.

Take of the ſharpeſt tincture of Tartar, three drams; Elixir Proprietatis prepar'd without an Acid, two drams. Mix, *&c.*

Take of the ſharpeſt tincture of Tartar, three drams; of the Carminative Spirit, a dram. Mix. Doſe forty or fifty drops twice a day.

XXI. During the cold fit, the ſick Perſon muſt abſtain from eating or drinking. After the height of the fit, when the ſweat begins to breath forth, and the heat is violent, he may drink plentifully. Warm Wormwood Wine, or Wormwood Ale, is not improper; if there be any apprehenſion of a Scorbutic Fever, the Wine may be tinctur'd with Antiſcorbutics. But in Quartan Paroxyſms, 'tis adviſeable to drink little or none at all, or at leaſt to drop forty drops of Spirit of Sal-armoniac into the Liquor, which muſt always be warm.

Let the ordinary drink be Water or ſmall Beer mix'd with Wormwood Wine, or clarify'd Whey, with a few drops of the juice of Citrons. Refrigerating Juleps are improper,

proper, barring the case of immoderate heat, for which warm drink with Nitre or Spirit of Vitriol is very proper. As,

Take of the flowers of red Poppies, flowers of Roses, of each half a handful. Infuse them in a pound and a half of Poppy flower Water, or clarify'd Whey, and sharpen it with Spirit of Sulphur per Campanam. Let them stand in a warm place till the tincture be extracted. Then add of Syrup of Jujubes, two ounces; Syrup of Violets, an ounce. Make a Julep.

Take of the Conserve of Wood-sorrel, Conserve of Roses, Conserve of Clove Gilly-flowers, of each an ounce; dissolve 'em in a sufficient quantity of the decoction of Vipers-grass or boyl them gently in a close vessel. Strain the Liquor, and reserve it for use.

Take of the Roots of Wood-sorrel, and Tamarinds, of each an ounce; boyl them in Water. To four pound of the strain'd Liquor add three handfuls of red Roses, sprinkled with dulcifyed Spirit of Vitriol. Set them in a warm place, till the tincture be extracted. Then strain it, and add the Syrup of red Corants, and Syrup of Rasberries, of each three ounces. Mix, and reserve for use.

Take of Spring Water, half a pound, Cinnamon Water, half an ounce, fresh Juice of Citrons, an ounce and a half; Spirit of Vitriol as much as sufficeth for a grateful Acidity. Mix, *&c.*

XXII. In Tertians let not sweat be artificially promoted before the fourth fit: and if it comes naturally in the declensions of the fits, let the Person be lightly cover'd. In Quartans Sudorifics are improper, till the signs of concoction appear; but if sweat break forth of its own accord before that time, it must not be suppress'd.

XXIII. The chillness, shivering, shaking, *&c.* attending the cold fits, are admirably accounted for by applying Aromatic Oyls to the Stomac, Breast, Back-bone, Loyns, and soles of the Feet. As.

Take of Balsam of Peru, a dram; the distill'd Oyls of Cloves, of Mace, and of Amber, of each half a scruple. Mix and anoint the above mention'd parts.

Take of express'd Oyl of Nutmegs, a dram; distill'd Oyl of Cloves, distill'd Oyl of Cinnamon, of each fifteen grains. Mix, *&c.*

Take of the distill'd Oyl of Juniper-berries and Rosemary a scruple; distill'd Oyl of Cloves half a scruple.

Inwardly the ſame Symptoms are mitigated by exhibiting the fixed Salts, Aromatic Extracts, and diſtill'd Aromatic Oyls. But they are peculiarly calculated for ſuch Fevers where the cold Symptoms are more violent than the hot. The forms of preſcribing are ſuch as theſe.

Take of the Salt of Wormwood, a ſcruple; prepar'd Oyſter-ſhells and white Pepper in Powder, of each ſix or ſeven grains.

Take of Sal-armoniac, fifteen grains; Cloves and white Pepper, of each five grains. Make a Powder for two Doſes. To be taken before the invaſion of the fit.

Take of prepared Pearl half a ſcruple; Salt of Wormwood, fifteen grains; diſtill'd Oyl of Cloves, two drops. Make a Powder.

Take of the Salt of Wormwood, fifteen grains; Diaphoretic Antimony, half a ſcruple; Laudanum Opiatum, one grain; diſtill'd Oyl of Cloves two drops. Make a Powder to be taken two or three hours before the fit.

Take of *Crollius*'s ſpecific againſt Fevers, a dram; Salts of Wormwood and of leſſer Centory, of each half a ſcruple; diſtill'd Oyl of Cloves, three drops. Make a Powder for two Doſes.

Take of Carduus Benedictus Water, an ounce; Cinnamon Water, a dram; extract of Gentian, half a dram; Spirit of Sal-armoniac, half a dram; Syrup of Carduus Benedictus, two drams. Make a draught to be exhibited two hours before the fit. In Quartans, when the cold Symptoms prevail moſt, the Doſe of the Extract may be augmented; but in Tertians, when the heat obtains the aſcendant, the quantity of the Spirit of Sal-armoniac ought to be inlarg'd.

Take of the extracts of Wormwood, Carduus Benedictus, leſſer Centory, and Treacle, of each from five to ſix grains; diſtill'd Oyl of Cloves three drops. Make Pills to be given before the fit, when cold and its appendants prevail, and little or no heat inſues. For Oyl of Cloves is an incomparable Antidote againſt ſhivering. Laudanum Opiatum and extract of Troches Alhandal are proper ingredients for the ſame purpoſe.

XXIV. If the heat and its Conſequences be more troubleſome than the coldneſs, Sal Armoniac, or its urinous Spirit, is the only proper Medicine. As,

Take

Take of Sal Armoniac a ſcruple; *Poterius*'s Antihectic Powder half a ſcruple. Mix, and make a Powder to be given before the Fit.

If a raging heat ſucceeding to the cold Fit be attended by a notable proſtration of ſtrength, ſhort breathing, a quick frequent and ſmall Pulſe, Spirit of Sal Armoniac mix'd with Vinegar and Crabs Eyes will readily give relief. If attended by Heart burnings, gnawings of the Stomac, Unquietneſs, anxiety of the Breaſt, imminent Suffocation, as it frequently occurs in Hypocondriac, Hyſteric, and Scorbutic Conſtitutions, the ſame Spirit of Sal Armoniac is proper to be given, after premiſing Vomits or Clyſters, according to the Circumſtances of the Patient; and in the mean while 'tis not amiſs to apply a Plaiſter of Tacamahac, mix'd with Oyl of Amber or Balſam of *Peru* to the region of the Stomac.

XXV. In Chronical Quartans, let the Phyſician inquire if there be any ſchirrus Swelling in the Bowels, or hardneſs in the Hypocondria; if Wind moleſt the Guts, or Scorbutic Symptoms beſet the Body; for theſe Symptoms muſt be particularly accounted for, before the Fever can be cur'd; which generally in this caſe ends in the eruption of the Itch or Scab.

XXVI. In ſtubborn Quartans, the Spaw-waters are convenient, provided the Stomac and Bowels be regular and in good order, Otherwiſe Chalybeat Medcines are more proper. As,

Take of the Eſſence of Wormwood half a dram; ſolution of Steel in the Juice of Apples a dram. Mix them to be given before the Fit.

Steel and its Productions are of excellent uſe in all Hyſteric, Hypocondriac, ſplenetic and ſcorbutic Conſtitutions. It not only removes the obſtructing Acid in the Bowels, which the Jeſuits Powder would fix and ſettle, but mitigats the impetuoſity of the fit, which Anodyns do only palliate and foment.

XXVII. Tho' chronical Agues may ſeem to be diſcuſſed, by reaſon of the diſappearance of the Fit, yet 'tis adviſable not to deſiſt for ſome time from a ſpare and cautious Diet, and the uſe of the more noted Febrifuga's, ſuch as Sal Armoniac, Salt of Hartſhorn, volatil Salt of Amber, volatil Salt of Vipers, *&c.* for that oft-times they relapſe after the diſcontinuation of ſeveral weeks.

If theſe Remarks be heedfully minded, the Cure of Agues will prove eaſie and ſafe; and many fatal ſymptoms which

inſue an untimely ſuppreſſion of the Fits, or any other diſorderly part of Cure, will be effectually prevented.

As for the Scorbutic Fevers that I've ſo frequently mention'd, 'tis to be remark'd, that if the Scurvy be not directly taken care of, 'twill be impoſſible to compaſs the Cure of the Fever. For which purpoſe the Spirit of Scurvy-graſs, and *Mynſichius*'s Arcanum Duplicatum are noted ſpecifics; they may be mix'd with other Ingredients, as follows.

Take of *Quercetanus*'s Antiſcorbutic Water an ounce; Spirit of Sal armoniac half a dram; Spirit of Scurvy-graſs, a ſcruple; Laudanum Opiatum one or two grains; *Foreſtus*'s Antiſcorbutical Syrup two drams. Mix them to be exhibited before the Fit, after the univerſal Evacuations are premis'd.

Take of Mint Water, Fennel Water, Fumitory Water, and Carminative Water, of each an ounce; Spirit of Scurvy-graſs, Spirit of Venice Treacle, of each a dram; dulcify'd Spirit of Nitre twelve drops; prepar'd Crabs-eyes half a dram; Laudanum Opiatum, a grain and a half; Syrup of Orange-peel ſix drams. Mix, and give a ſpoonful now and then, in the very time of the Fit. It is of wonderful uſe in Scorbutic Fevers attended by extream heat, ſtraitneſs of the Breaſt, Wind, violent parts in the Joints, *&c.*

Poterius's Antihectic Powder, with magiſtery of Coral prepar'd with Juice of Citrons, is a ſovereign Medicine in Scorbutic Quartans, that threaten a Phthiſic. It may be given in a convenient Vehicle both before and in the Fit.

Whey of Goats-milk, impregnated with the virtue of Antiſcorbutic Herbs, is a proper Liquor both for reſtraining the heat and conquering the Scurvy; or it may be mix'd with gentle Laxatives, by reaſon that Scorbutic Fevers are attended by a conſtipation of the Belly. As,

Take of Tamarinds, half an ounce; boyl them in Whey. Then ſtrain the Whey, and add of the Tincture of the flowers of Daſies, two drams; with ſolutive Syrup of Roſes. Make a Julep, to be given during the violence of the hot Fit.

Take of the Decoction of Corants in clarify'd Whey, a pound and a half; Juice of Scurvy-graſs clarify'd by ſtanding, three ounce; freſh Juice of Citrons, an ounce. Make a Julep, as above.

Milk mix'd with Sugar or Spirit of Sal-armoniac is very proper before and after the Paroxyſm.

From what has been said upon the whole matter, we may gather the general method of curing intermitting Fevers into this form. First, the Stomac must be prepar'd with a digestive Powder or two; then a Vomit must be exhibited before the Fit, or a Laxative administred on the intermitting day. Afterwards volatil Alteratives, or chalybeat Medicines given during the time of intermission, according as the Symptoms require; and in the time of the Fit, the precipitating Alcali's both volatil and fix'd; of which Class are the bitter Herbs, partaking something of an aromatic Virtue, such as Worwood, lesser Centory, Fumitory, Carduus Benedictus, Chamomil, Celandin, Gentian, Zedoary, *&c.* They are us'd by way of Powder, Decoction, express'd Juice, Extract, or in the form of a fix'd Salt. In Powder some give a dram of the Flowers of lessor Centory, or of Carduus Benedictus, *&c.* As for Decoctions, those of a few Ingredients are infinitely the best. As,

Take of the Leaves of Carduus Benedictus, a handful or two; of Asarabecca Roots, an ounce; infuse them for the space of a night in four Pints of Water, then boil away the third part: Let the Patient take three or four ounce of this Decoction warm in Bed, six hours before the Fit, and 'twill procure a plentiful sweat.

The Juice of Wormwood exhibited in Wormwood-wine some hours before the Paroxysm, is much approv'd. The Extracts of these bitter Herbs, are likewise frquently given, both during the time of intermission, and a few hours before the Fit. Or an Essence may be prepar'd thus,

Take of the tops of lesser Centory and Wormwood, of each three handfuls; of the Leaves of Mouse-Ear, and Asarabecca, of each two handfuls; of the Herbs Cinquefoil, Hore-hound, Rue, Carduus Benedictus, of Water Germander, of each a handful; tops of St. *John*'s Wort, half an ounce; Roots of Celandin, Dandelion, Angelica, Zedoary, Gentian, Master-wort, white Dittany, Devil's-bit, Fearn, and round-rooted Birth-wort, of each an ounce; Cloves an ounce; long Pepper six drams; Ginger, half an ounce. Extract the Essence with Spirits of Wormwood, Carduus Benedictus, and lesser Centory. Dose forty or fifty drops to be given on the intermitting day. But the Vegetable Salts prepar'd from these Herbs, together with Spirit of Sal-armoniac, are much beyond any other Medicines.

The Jesuit's Bark is commonly join'd to the vegetable train of specifics. The ways of using it are as follows.

Take

Take of the Jeſuit's Powder, from a dram to two drams. Infuſe them for the ſpace of a night, in two or ſix ounces of Rheniſh or Spaniſh Wine; in the morning, ſhake them together, and let the Perſon drink it warm before the acceſſion of the Fit.

Take of the Jeſuit's Powder, ſix or eight drams; Gentian Roots, three drams; Flowers of leſſer Centory, four little handfuls; long Pepper, a dram; Salt of Tartar, half an ounce. Mix for a Powder.

Take of the Jeſuit's Powder ſix drams; Gentian Roots and filings of Steel, of each three drams; Cloves, a dram and half. Mix, *&c.*

Take of the Powder of Kinkina, ſix drams; Guajacum, two or three drams; tops of leſſer Centory, a handful; Cinnamon, two drams; Cloves and Crabs Eyes, of each a dram; Salt of Tartar, three drams; make a bag, to be infus'd in Rheniſh or Wormwood Wine. Of which let a draught be exhibited after the appearance of the ſigns of Concoction, ſome hours before the Paroxyſm.

But 'tis a fallacious remedy, and ought not to be exhibited till after the general Evacuations; and if the Body be not purged after the diſcuſſion of the Diſeaſe by this Medicine, 'twill relapſe after ſome time.

'Tis true, 'tis an effectual Remedy in Tertian and Quartan Fevers; but ſince 'tis an exotic Plant, our domeſtic Gentian may ſupply its want. If two or three drams of the Powder of Gentian, or a dram of its thickened juice be given in Wine about an hour before the Fit; it equals the efficacy of the Jeſuit's Powder. Myrrh and Caſtor are noted ſpecifics in Quartan and Scorbutic Fevers. They are given from a ſcruple to half a dram, in Wine, before the Fit. Some give forty or fifty drops of the Bezoardic Tincture, in Wormwood Wine, together with chalybeat diaphoretic Antimony, or *Timæus*'s pearl'd Powder, immediately before the Fit. Shells calcin'd, and burnt Hartſhorn, are exhibited in like manner, with good ſucceſs. Or,

Take of Nutmegs, Nitre and Allum, of each a dram. Make a Powder for three Doſes. Of which let the Patient take one before every Fit, being prepar'd to ſweat.

Take of prepar'd red Coral, half a dram; Sugar of Lead twelve or fifteen grains; Laudanum Opiatum, one grain. Mix, and exhibit in the Decoction of Carduus Benedictus before the Fit, and continue the uſe till the Fever be diſcuſs'd.

The

The congeal'd Spirits of Salt and Vitriol, Fulminatory Gold, and Salt of Antimony, are much approv'd. The Salt of Antimony may be thus prepar'd. Take diaphoretic Antimony, and digeſt it in Vinegar ſharpen'd with Spirit of Vitriol, in a moderate heat. Then ſtrain and evaporate the Sugar, and you will find a Salt or Vitriol, which may be further ſubtilis'd by diſſolving it in Spirit of Wine, and evaporating. If you mix this Salt with Flowers of Antimony, it proves an incomparable. Medicine againſt Fevers.

But we ought to remark, that all theſe fix'd Specifics are offenſive to the Stomac and Appetite, and Enemies to the digeſtive faculty: And if unſeaſonably adminiſtred, are follow'd by Relapſes, or Schirrus's in the Bowels: wherefore the paſſages ought to be well cleans'd before we attempt to preſcribe 'em; and when we do, they ought to be mix'd with other ſudorifics. As,

Take of Carduus Benedictus Water, two ounces; *Strobelbergerus*'s ſpecific Powder, half a dram; volatil Salt of Hartſhorn, ſix grains; Laudanum Opiatum, one grain. Mix, and exhibit before the Fit. For a Hyſteric Tertian, after the common premiſes, I've preſcrib'd the following Powder with very good ſucceſs.

Take of prepar'd Hartshorn, half a dram; Salt of Wormwood, a ſcruple; prepar'd red Coral, twelve grains; Extract of Caſtor, five grains; Laudanum Opiatum, two grains, Make a Powder for two Doſes. To be frequently repeated and taken before the Fit. After the Fever is diſcuſs'd by theſe ſpecifics, 'tis expedient to purge the Body thus;

Take of *Quercetanus*'s Pills of Ammoniac, twelve grains; Extract of Wormwood, ſix or eight grains; Extract of Troches Alhandal, two grains. Make Pills.

If a relapſe happen, give Sal-Armoniac mix'd with *Poterius*'s Antihectic Powder, or prepar'd Coral, before the invaſion of the Paroxyſm.

Some commend Vitriol as a good ſpecific. But above all, the fix'd Salts are beſt, which are preferable to any other preparation of the vegetable ſpecifics; Brimſtone or Gunpowder given from half a dram to a whole one, in Vinegar or ſharp Wine, is much approv'd. Or,

Take of fix'd Nitre, half a dram; Flowers of Sulphur, three drams; Flowers of Sal-armoniac, one dram; Powder of Red Sanders- ſix drams; white Sugar, two drams. Doſe a dram and a half, to be taken before the Fit.

Opium,

Opium, which is of noted vertue in intermitting Fevers; may, in caſe of a prevailing heat, be exhibited in Vinegar, after the Concoction is advanc'd.

XXVII. Having thus accounted for the direct Cure of intermitting Fevers; it remains to take a view of their Conſequences. Quartan or Chronical Fevers are oft-times follow'd by a Schirrus of the Spleen or Meſentery, or a tendency to the Hypocondriac illneſs. Now, to prevent this inconvenience, 'twill be needful to join Chalybeat or Splenetic Medicines to the common ſpecifics. The Extract of Steel prepar'd with Juice of Apples, or its liquid Eſſence mix'd with Spirit of Scurvy-graſs, or the tincture of Vitriol of Steel, are proper for this purpoſe.

Beſides internal Medicines, ſome are wont to make uſe of external helps. The Symptom of Heat, may be abated by an Epithema of Roſe-Vinegar, Juice of Houſe-leek and Nitre; or a Cataplaſm of Yeſt, Salt and Vinegar applied to the Feet. The material cauſe of the Fever is in ſome meaſure evacuated by the application of Bliſtering, or Corroſive Ingredients; ſome apply Cataplaſms of Garlic, Onyons, Saffron, Vinegar and white Pepper, juſt before the Fit, to the Wriſts. Some mix bruis'd Sage-leaves with Soot and the yelk of an Egg; others Salt, Hopps and Raiſins, for the ſame purpoſe. Some put a dram or two of Camphyr, in a bag, and faſten it to the pit of the Breaſt, 'till it be exhal'd. Others apply the following Plaiſter to the Stomac.

Take of Hony, two ounces; Maſtic and Turpentine, of each half an ounce; boil the Hony to a due conſiſtency; then mix it with the other Ingredients for a Plaiſter. Or,

Take of ſhining Soot, an ounce and a half; Turpentine, ſix drams; Spider's Webbs, an ounce; Camphyr, two ſcruples; with Oyl of Scorpions make a Ploiſter, to be applied to the Wriſts.

Oyl of Spiders, living Spiders, and all their preparations are much in uſe. In malignant and Quartan Fevers, the following Plaiſter is very ſucceſsful.

Take of Venice Turpentine, an ounce; melt it in a Copper Kettle; then throw in twenty or thirty living Spiders; ſtir them about with a wooden Spatula, 'till the Spiders be cover'd. Then add of the Powder of Toad's-fleſh dry'd, Powder of red Land-Toads, dry'd, of each an ounce; crude Tartar, an ounce: Savin two or ſix drams. With Oyl of Scorpions make a Plaiſter.

If

If we suspect any swelling of the Spleen or Bowels, 'tis proper to apply to the region thereof, the Plaister of Hemlock, or of Tobacco, or *Vigo*'s Plaister with Mercury mix'd with Gum Ammoniac. The thicken'd Juice or Extract of Tobacco is conducive to this purpose, as also *Sylvius*'s Carminative Plaister. If the region of the Spleen or Belly be molested with pains, apply what follows.

Take of the Extract of Tobacco prepar'd by decoction, three ounces; Opium dissolv'd in Wine, and reduc'd to the consistence of an Extract, one ounce; Wax, half a pound. With Terpentine and Oyl of Tobacco, make a Plaister.

Having thus dispatch'd the regular cure of Fevers, 'twill not be improper to propose some method of relief for those, who by an unseasonable and unskilful suppression of the Fever, are liable to frequent Relapses, convulsive Pains in the Belly, Head-aches, Asthma's, weariness of the Body, *&c.* In this case, let the Body be render'd soluble by the Decoction of Raisins, and such like laxative and emollient Ingredients. Then exhibit some pacific mixture; as,

Take of Mint-water, an ounce and a half; Spirit of Sal-armoniac, half a dram; Hysteric Laudanum, two or three grains; Syrup of Orange-peel, three or six drams. Mix for a draught, and continue the use for some time. If any swelling or violent pain continue in the Hypogastria, apply the Plaister of Gum-Ammoniac and of Galbanum, with Oyl of Bricks. After the Symptoms are gone, 'tis advisable to continue for some time the use of Wormwood, or such Remedies as partake of it.

SECT. IV.

Of continual Fevers.

ART. I. *Of day Fevers.*

OFt-times the abuse of the six not natural things, disturbs the natural fermentation of the Blood, accelerates the Pulse, and in some measure disorders the functions; which Symptoms disappear in a days time, either of their own accord, or by using some gentle Sudorific.

This

This Fever is call'd Continual, by reaſon that it does not intermit from beginning to ending. If the Blood be vitiated, it is apt to degenerate into a Synochus, or a Fever that laſts ſeveral days. In order to prevent which, give the following Julep.

Take of the Decoction of Hartſhorn with Vipers-graſs, one pound; juice of Citrons, juice of Quinces, of each half an ounce; tincture of Columbine-flowers, and of Dazies, of each a dram and a half; Syrup of Rasberries two ounces; Spirit of Vitriol, as much as ſufficeth for a grateful Acidity. Make a Julep, or inſtead of the Julep, make a Decoction of the like Ingredients, together with gentle Laxatives.

If the Belly be ſwell'd, and the Body very hot, take of Fennel Water an ounce and a half; Carminative Water, ſix drams; dulcifi'd Spirit of Nitre, three drams; Syrup of Orange-peel, half an ounce. Mix and make a Julep.

ART. II.

Of the Principal Acute Fevers.

THe continual Fevers that laſt above one day, are either Primary or Symptomatical. The former are a Diſeaſe ſubſiſting by it ſelf, which, if its Period be ſhort, and its Symptoms grievous, is call'd Acute; if it be ſlow-pac'd, and advance without any notable diſturbance, 'tis call'd a ſlow Fever. Both of which are call'd Compounds, or periodical continual Fevers, if they admit of any remiſſion, or exacerbation in their continued progreſs. But if their vehemence be ſtill the ſame, they are call'd ſimple Synochus's.

If Acute Fevers come without the inflammation of any particular part, they are call'd Solitary. And if diſmal Symptoms happen, beyond the apparent reach of the Fever, 'tis ſtil'd malignant: But if otherwiſe, Benignity is its Character.

The primary, ſimple, continual, ſolitary, hot, benign Fevers are caus'd by the prevalency of a volatil, oyly, bilious Salt in the Maſs of Blood, that hotly encounters the Acid Particles, creates a violent motion and heat, accelerates the Pulſe, tinctures the Urine, and the while Victory is undetermin'd, renders it thin and crude; but when theſe volatil parts are ſubdu'd, and precipitated by the Acid, the Urine depoſites a ſediment, and affords the true ſigns of Concoction.

The

The remote cause for the most part, is the depravation of the Chyle, occasioned by the defect of the Choler, or a faulty digestion in the Stomac; for the stomachic digestion is the Mother and source of all the fermentations of the other juices in the Body. Now the vicious heterogeneous Particles conveyed in the Chyle to the Blood, disturb its natural fermentation, and provoke its constituent parts to rise up, in order to expel the Hostile Intruders. Thus we see that those, whose Blood is well stock'd with bilious Particles, whose constitution is foul, corpulent, and plethoric, who feed high, and drink strong Liquors, are most liable to this preternatural fermentation. In like manner, whatever stops the insensible transpiration, accumulats oyly Particles in the Blood, and exalts the Spirits, that, I say, predispose the Blood for receiving a feverish impression.

The cause of acute, compound, periodical Fevers, is some vicious Acid juice, proceeding from the Stomac, returning by intervals, while the volatil oyly ferment continues its course without intermission. They are, as it were compounded of a continual acute Fever, and an intermitting one, which is always a Tertian; for Quotidian and Quartan continued periodical Fevers (if any such there be) are rather slow than acute. This compound sort of acute Fevers, is oft-times attended by a notable heat, without any shivering.

If an unsufferable Thirst, dryness of the Tongue, Headaches, Deliriums, a high tincture and muddyness of Urine, attend a continual Fever, 'tis call'd a Causus or burning Fever. The cause of these Symptoms is the hot ingagement of a sharp volatil Acid, with the volatil oyly Particles. Besides, the stomachic ferment being vitiated, and unqualifi'd for its wonted office, the contents of the Stomac degenerate into an alcalin oyly texture, which sticks to its pleats, irritates the Membranes of the Gullet, and, by consent, the Tongue it self: And moreover, when it joyns the Blood, impregnates the Lymph which waters the Throat, and is voided by way of spittle, with a volatil oyly salt. And if this vicious Saliva stick to the Tongue and Throat, it becomes troublesome and inflaming; causing in these parts a redness, heat and pain, known by the name of Prunella.

Continual acute Fevers are styl'd, Lipyria's, when the superficial parts of the Body are molested with a sense of cold, while those within are beset with a violent heat. They proceed for the most part from the inflammation of

ſome very ſenſible membranous internal part, and upon that account are referable to the ſymptomatical Claſs. If there be any ſuch thing as a primary Lipyria, the ſenſe of external cold muſt proceed from the irritation of the nervous membranous parts, and that of inward heat from the preternatural fermentation of the Blood.

If a continual acute Fever be attended by a Conſumption, or colliquation of the fat oyly parts of the Body, and a tendency to a Maraſmus, 'tis called a melting Fever. Theſe oyly fat nutritious juices are voided either by ſtool in the form of ſtinking Excrements, or by a cool glutinous ſweat, or by copious quantities of Urine, the ſurface of which is cover'd with fat, or by falling into the cavity of the Belly, or upon the Feet after a Hydropic manner.

The cauſes of melting Fevers are, the thin open texture of the nutritious juice and fat, occaſion'd by the want of a fixing congealing Acid; The acrimony of the Bile, which ſharpens and whets the Chyle, and qualifies it for unlocking the Body of the nutritious and fat juices; the vehemence of diſſolving heat; and the cauſtic penetrating ſharpneſs of the febrile ferment. The remote cauſes are, the epidemical conſtitutions of the Air; the immoderate uſe of Brandy, or ſpirituous Liquors, which over-whet the oyly volatil Salt of the Choler; the over-frequent ſmoaking of Tobacco, and drinking cold Water after a violent heat. The Scurvy and Cancer in the Breaſts are oft-times liſted into the number of the cauſes. Theſe melting Fevers ought to be heedfully diſtinguiſh'd from that profluence of ſweat which proceeds from the deficiency of the Spirits, the unbending of the fibres, and flagging of the looſer parts, as in ſwoonings, *&c.*

Some continual burning Fevers are call'd Delirious, when the Spirits move irregularly in the Brain, cauſing doating, inſufferable Head-achs, ſtubborn watching, and ſometimes Convulſions. The cauſe is partly the heat of the Brain and Spirits, occaſion'd by the violent fermentations of the Blood; and partly the malignity of the febrile ferment, which debauches the quality of the Spirits, and galls the membranous nervous parts.

If the malignant ferment break out in puſhes and whelks in the Face, Mouth or Head, the Fever is call'd Pemphygodes. If the Perſon ſweat copiouſly the firſt day of the Fevers invaſion, but without any eaſe or benefit, 'tis call'd Elodes. If the Perſon be diſquieted, and toſs in Bed, 'tis call'd Aſſodes. This laſt Symptom may be cauſed by weakneſs,

neſs, notable malignity, vehement heat, impetuoſity of the Spirits, and eſpecially by vicious humors diſturbing the mouth of the Stomac. If the Perſon be moleſted with a Hiccough, which always proceeds from the Stomac, 'tis call'd Lyngodes. If a ſhivering and ſhaking attend the whole progreſs of the Fever, as it oft-times does in the ſuppurations of internal Ulcers, and in compound continual Fevers, 'tis call'd Phricodes.

Of all the compound continual, or continual periodical Fevers, that call'd Semitertiana, is moſt worthy our regard. 'Tis generally look'd upon to be compos'd of a Tertian and Quotidian, one of which is a compound continual, and the other an intermitting Fever. Authors give ſeveral varying accounts of the periods of this Fever; however 'tis for the moſt part caſt into this form; *viz.* A continual Fever ſeizes the Patient, and periodical ſhiverings follow'd by a notable heat, obſerve the order of a Tertian, and gentle ſhiverings ſucceeded by a meeker heat follow a Quotidian period.

The ſigns of Acute Fevers are manifeſt. A notable heat and thirſt always attends a burning Fever. 'Tis uſhered in by a wearineſs of the Body, and perturbation of the Head for ſome days; then by a chillneſs and ſhivering, which intimates that the volatil oyly particles have not yet obtain'd the aſcendant over the Acid. Afterwards a notable heat ſucceeds; the Pulſe is frequent and accelerated, and if the Salts of the Blood are equally match'd, 'tis large and equal; if it be ſmall and unequal, it ſpeaks malignity. If the Salts of the Blood are very ſharp and exalted, a biting vehement heat moleſts the whole Body; if they are temperate, the heat is milder. The Urine, at firſt, is thick, red, and dark; in progreſs of time it diſcovers a Cloud on the top, and upon the Criſis, a copious ſediment at bottom. If at the height of the Diſeaſe the Urine be thin, 'tis a fatal ſign. If at firſt it appear thick and dark, and afterwards degenerate into a thin conſiſtence, it portends unquietneſs, doating, and frequently Death. But for making a due eſtimate of the Urine, we ought to have a particular regard to the conſtitution of the Patient. For the Urine of thoſe whoſe Blood is copiouſly temper'd with lymph and nutritious juice, is never ſo high tinctur'd nor ſo thin; as that of Bilious, Scorbutic, or Phthiſical Perſons. Nor can thoſe who ſweat much void ſuch large quantities of Urine and ſediment as others. The ſpittle is glutinous and ſcanty, attended by intolerable thirſt, watchings, headaches, *&c.*

Acute Fevers come regularly to a Criſis in hot Climates; but in theſe Countries, where we are wont to anticipate Nature by alterative, diaphoretic, and abſorbent Medicines, they are not quite ſo regular. Sometimes they ſpend themſelves by gradual ſolutions by Urine, Night-ſweats or Salivation.

As for the Prognoſtics of acute Fevers: a ſudden unaccountable lightning or eaſe is a mortal ſign. If the Symptoms are extream high, the Breaſt diſturb'd, and the Stomac queaſy, or moleſted with a gnawing pain; if in the beginning of the Diſeaſe a looſeneſs happens, attended by a notable proſtration of ſtrength, and a fœtid corruption of the excrements; in a word, if any ſigns of malignity appear, tis a dangerous caſe. Vomiting is a good ſign. If the Patient be ſomewhat benefited and not overweakened by a looſeneſs, 'tis not ſo very dangerous. Sometimes a melting Sweat, in which red ſand-like matter is voided, and found in the Bed, may perform the cure. White, pale, crude Urine is always a bad Omen. The more reddiſh it appears at firſt, the ſooner the Diſeaſe comes to its height. The Fevers that are occaſion'd by evident cauſes are more favourable, than thoſe whoſe cauſe is inviſible. If ſtrength decay apace, without any notable evacuation, Death is at hand. If the Tongue be moiſt and of a natural red colour, all is well; but if it be rough, dry, black, livid, ſlimy or chop'd, 'tis in a bad condition. The ſwelling of the Face ſpeaks the length of the Diſeaſe. If the ſigns of concoction appear the fourth day, the Fever diſappears the ſeventh; if they are put off till the ſeventh, the eleventh concludes the matter.

The Criſis of the Fever ſignifies the period in which the uſeleſs and noxious parts are ſeparated and expelled, ſometimes by Ulcers in the Lips and Noſtrils, where the skin is thin, and Blood veſſels abound; ſometimes by a ſcab diffus'd over the Body; and ſometimes by Urine, ſweating, Salivation, *&c.*

In hot Climates the Diſeaſe is ſometimes cur'd by Bleedings at Noſe or other places. The Bleeding at Noſe is for the moſt part preceeded by a tingling of the Ears. If this Criſis be imperfect, or diſturbed by an indiſcreet uſe of abſorbent fixing Medicines, 'tis followed by inſufferable pains of the Stomac, Guts or Joynts, and ſometimes Palſies.

If a Phyſician know how to anticipate the Criſis, by evacuating the morbific matter betimes, and curbing the impetuous motion, he ought to do it. But in many caſes we are

at a loss how to compass it, and therefore are obliged to trace Nature's steps, and patiently wait her critical hour, especially in benign Fevers, where Nature endeavours to throw out the offensive particles, and purify the Blood. Now to thwart her in so good a work is dangerous. So that all that a Physician can do, is to keep Nature upon its Legs, and moderate its efforts. This indication is answer'd by cleansing the first passages; tempering the urinous sharp Salt in the Blood; assisting Nature in its design'd Evacuation; and mitigating the occasional Symptoms. Now in order to a happy attainment of these ends, 'twill be needful to subjoyn the following remarks.

I. That a malignant Fever in the beginning imitates the Symptoms of a Causus; and therefore the safest way is to commence the cure of the same by Alexipharmacal Medicines, and after the fear of the latent malignity is over to return to the usual method of cure.

II. That these Alexipharmacal Medicines ought to be mix'd with precipitating Ingredients, as in the Bezoardic tincture, in order to promote a gentle transpiration; but we must not by any means attempt to force sweating.

III. That if the sick Persons be thirsty and hot, we must not deny 'em drink; only let it be warm and all of one sort, and rather drunk of frequently, than much of it taken down at once, for fear of weakning the Stomac. If the thirst be violent, and the Patient be free of a looseness, clarify'd Whey with juice of Citrons is a proper liquor. Barly Water is commonly given, but I do not approve of it, for that it feeds windy crudities in the Stomac. Spirit of Sulphur drop'd into Water is very good; as likewise Water mixt with a sixth part of Wine, and juice of Citrons or Quinces, and Gelly of Hartshorn.

IV. In the beginning and progress of the Disease, if the Breast and Belly be oppress'd, and the Body costive; if the Blood boyl high, and the humors move towards the head, inject Clysters, or exhibit gentle laxative Decoctions. If the Symptoms advance in a precipitant forward way, let this be done before Bleeding.

V. Vomits are proper in the beginning; and if the strength of the Patient admit, in the progress of the Disease. They mitigate all the Symptoms, which are oft-times caus'd or at least heightened by the vicious humors lodg'd in the first passages. They must be given in moderate Doses, by reason that the humors are floating and moveable in continual acute

Fevers, tho' in the intermitting ſort they are extream fix'd: If the Patient was in the beginning moleſted with a propenſity to Vomit, or a ſqueamiſhneſs, a bitter taſte in the mouth, or bitter belchings, heart-burnings, anxieties of the Breaſt, ſwooning, *&c.* Vomiting is highly convenient.

VI. Purgatives properly ſo call'd are prejudicial in continual Fevers, except in the Declination, when the febrile matter is not totally evacuated by Urine and Stool. 'Tis true in benign Fevers we ought to keep the Body ſoluble, and free the Stomac from the overflowing Choler by mild Lenitives. But proper purgatives exhibited before the concoction of the matter are doubtleſs very offenſive. For if they do not operate they occaſion gripes, ſwimmings of the head, ſwoonings and an infinity of diſorders in the Body without any evacuation; if they happen to work well, they infeeble the Body, melt down the humors, and prolong the Diſeaſe. The decoction of Tamarinds in Whey is a proper and ſafe Laxative, or, if in the beginning you deſire to cleanſe the firſt paſſages, take what follows.

Take of the Pulp of Tamarinds, a dram; Powder of Rhubarb, a ſcruple; prepar'd Scammony two or three grains. Make a Bolus. Or,

Take of choice Rhubarb, a dram and a half; pick'd Senna Leaves, a dram; infuſe them in Whey all Night, in the Morning let them boyl gently, and add to the ſtrain'd Liquor, two drams of ſolutive Syrup of Roſes.

VII. If the Pulſe be large and ſtrong, if the conſtituition of the Patient be plethoric and full, if the Blood boyl high, or any notable ſuppreſſion went before, 'tis neceſſary to bleed in the beginning of the Fever, without any regard to Morning or Evening, or any ſet time. After the third or fourth day 'tis too late. If the Fever remit, let the Blood be drawn forth during the time of the remiſſion; and before the adminiſtration of a Vomit. Some are wont, in a Prunella, to open a Vein under the Tongue; and if the Blood run briskly, 'tis accounted a good ſign; if it only ſqueez out by drops, 'tis ominous. But if theſe foregoing Symptoms be not viſible, let Bloodletting be quite omitted, and a Vomit ſupply its room. Frequent experience teaches us that repeated Blood-letting exalts the Fever, eſpecially in theſe Northern Climates, and renders the Patient liable to relapſes. The Fever it ſelf exhauſts and dries up the Blood in the Veins, according to *Spigelius* and *Argenterius*'s obſervations; upon which account we ought to be very cautious in leſſening its quantity.

VIII. We

VIII. We ought to encourage a breathing ſweat during the whole courſe of the Diſeaſe, by exhibiting the Salts of Wormwood, Carduus Benedictus, *&c.* Coral, ſeal'd Earth, Mineral Bezoar, Hartſhorn, *&c.* To which we may add precipitating Ingredients, in order to correct the febrile ferment. But all ſulphureous volatil roſinous things ought to be carefully avoided; and before the height of the Diſeaſe all forc'd ſweats are improper.

IX. Meat or Food muſt never be forced upon Feveriſh Perſons; or if their appetite require any, let it be very thin and watry. Above all, in the declination, take care of eating Meat or craming the Stomac, while the digeſtive faculty is yet weak.

X. In the beginning or height of a Fever Opiats are improper. In the increaſe, while the Spirits rage, and ſtrength is not quite exhauſted, they are of uſe for pacifying the Spirits, preventing their Conſumption, and promoting the Concoction of the matter. Let 'em be always mixed with proper ſpecifics.

From theſe obſervations we may infer that the alterative ſpecifics are ſuch as either reſpect the Fever its ſelf and its material cauſe, or the Symptoms that attend it. Of the former ſort are Nitre, Arcanum Duplicatum, and the Sulphurs of Minerals fix'd by Nitre, Diaphoretic Antimony, Mineral Bezoar, Cinnabar of Antimony, Chalybeat Mineral Bezoar, *&c.* Cooling and aperient Herbs, as Cichory, Dandelion, Borrage, Bugloſs, Fumitory, Lettuce, Sorrel, Purſlain, Roſes, *&c.* Temperate oyly Seeds, Emulſions, *&c.* Hartſhorn, Coral, ſeal'd Earth, Ivory, *&c.* To which we may add Alexipharmacal Medicines, volatil Salts of Animals, as of Hartſhorn, *&c.* Of the latter ſort are the Vegetable and Mineral Acid Spirits, eſpecially the laſt, of which the Spirit of Sulphur and Nitre are the beſt; but they ought to be ducify'd by Spirit of Wine, for temperate things are moſt agreeable to Nature. Spirit of Vitriol contains in it ſome metalline parts, that are very offenſive. In the vegetable Province, the clarify'd juices of Acid Fruits are very proper, and much preferable to Syrups. Such are the juices of Citrons, of Quinces, of Barberries, of red Corants, *&c.* The juices of Houſe-leek, Purſlain, Plantain, *&c.* are likewiſe very uſeful. Tamarinds are much approv'd by reaſon of their laxative and cooling quality.

As for the forms of Receipts, preſcribe as followes. If there be any ſuſpicion of a latent malignity, let forty or ſixty drops of the Bezoardic tincture be exhibited in the beginning of the Diſeaſe. Then,

Take of the decoction of Hartſhorn, with the roots of Vipers-graſs, a pound; freſh juice of Citrons, two ounces; Syrup of Water Lilly-flowers, Syrup of white Poppies, of each ſix drams; dulcify'd Spirit of Nitre, as much as ſufficeth for a grateful acidity. Make a Julep. Or,

Take of the decoction of Hartſhorn, with the Roots of Vipers-graſs, one Pound; juice of Barberries, juice of red Corants, of each an ounce and a half; tincture of Roſes, tincture of Violets, of each a dram; Syrup of the juice of Citrons, an ounce and a half; Spirit of Sulphur as much as ſufficeth for a grateful acidity. Mix for a Julep. Or,

Take of common Water a convenient quantity, with a little Wine, and as much of the juice of Quinces as ſufficeth for a grateful acidity. Mix, *&c.*

Take of Borrage Water, Bugloſs Water, and Water of Rasberries, of each an ounce; Cinnamon Water, three drams; freſh juice of Citrons, ſix or eight drams; Confection Alkermes, a dram and a half; Syrup of Rasberries half an ounce. Mix, *&c.*

Take of the Conſerves of Wood-ſorrel, of the pulp of Citrons, and Conſerve of Clove Gilly-flowers, of each an ounce; Rob of red Corants ſix drams; Confection Alkermes, two drams; with a ſufficient quantity of the Syrup of Rasberries. Make an Electuary.

The decoction of the Roots and Leaves of Wood-ſorrel mix'd with the juice of red Corants, and Syrup of Rasberries, is a very palatable Liquor for quenching thirſt.

Extemporary tinctures may be drawn from the flowers of Dazies, Poppies, Roſes, Clove Gilly-flowers, Violets, Columbines, *&c.* with common Water, or the decoction of Hartſhorn and Vipers-graſs, or red Poppy Water, *&c.* The flowers being firſt ſprinkl'd with Spirit of Sulphur, or of Vitriol. Theſe tinctures are of a pleaſant red colour, for all blue flowers when mix'd with an Acid Spirit, yield a rutilant tincture.

Theſe tinctures may be ſweetened with Syrup of Rasberries or of Violets, or of Jujubes; and are ſometimes joyn'd to the dulcify'd Acid Spirits, and drop'd into the Patients ordinary drink.

Inſtead of Juleps or Tinctures, ſome uſe the Decoction of Tamarinds; as, Take of the pulp of Tamarinds, from two

two to three ounces; boyl them in a ſufficient quantity of Whey. To two pound of the ſtrain'd Liquor, add Juice of Citrons, ſix or eight drams; Tincture of Daſie Flowers, three drams; Syrup of the Juice of Citrons, an ounce and a half. Mix and exhibit for ordinary drinking.

Whey is an admirable drink for Feveriſh Perſons, if purify'd by the Juice of Citrons, or Pulp of Tamarinds. As, Take of Whey, two pound; freſh juice of Citrons, three drams; Flowers of Daſies, and of red Poppies, of each a handful and a half. Let 'em boyl in a cloſe Veſſel, till the Whey be impregnated with the Tincture. Strain the Liquor, and ſweeten it with Syrup of Poppies, or of Raſberries.

Next to the foregoing Medicines is Nitre, which is univerſally approv'd by all Practitioners. The preparation of it with Sulphur, call'd Sal Prunellæ, is of no efficacy; but if the crude Nitre be purified by ſome ſharp Lye, it proves an admirable Remedy. Nitrum Antimoniatum, which is a complication of Nitre with the Sulphur of Antimony, may be given to a dram in their ordinary drink, three or four times a day, or in Powder together with Antihecticum Poterii. Diaphoretic Antimony, Mineral Bezoar, or that call'd Joviale, or Saturninum, together with Hartſhorn prepar'd without fire, and the above mention'd abſorbent Earths, are all proper for mitigating the fermentation, and promoting a gentle breathing heat. As,

Take of Raſberry Water, two ounces; Water of Vipers-graſs, and freſh juice of Quinces, of each an ounce; Bezoardicum Joviale, a ſcruple; Syrup of white Poppies, an ounce; dulcify'd Spirit of Nitre as much as ſufficeth. Take a ſpoonful now and then.

Take of the Water of the Flowers of the Sloetree, Water of Elder-Flowers, and Dandelion Water, of each an ounce; Gelly of Hartſhorn, an ounce and a half; Hartſhorn prepar'd without fire, a ſcruple; *Poterius*'s Antihectic, and Diaphoretic Antimony, of each twelve grains; Syrup of Poppies, ſix drams. Mix and uſe as above.

In a ſolid form they are preſcrib'd thus. Take of purify'd Nitre, ſixteen grains; *Poterius*'s Antihectic Powder, half a ſcruple; Sugar of Lead five grains. If a Delirium be fear'd, or Malignity ſuſpected, add a grain or two of Camphyr.

Take of Nitrum Antimoniatum, two ſcruples; Chalybeat Diaphoretic Antimony, half a dram; Laudanum Opi-

atum

atum, a grain or two. Mix for two Doſes, to be taken at night in a convenient Vehicle.

Depurated Nitre or Nitrum Antimoniatum, may be diſſolv'd in their ordinary drink, after the rate of half an ounce in twenty four hours.

Emulſions are next in order. They are very proper for tempering the bilious Salt, and qualifying the acrimony of the Blood. But they ought not to be too frequently or copiouſly us'd; for that they weaken the Stomac, and clog the Appetite. Let 'em be mix'd with fix'd Powders, Thus;

Take of ſweet Almonds, two drams; Seeds of white Poppies, a dram; of the four cold Seeds, of each a dram; with Water of Wood-ſorrel, make an Emulſion: To which add, Diaphoretic Antimony, and Mineral Bezoar, of each half a dram. Sweeten it with pearl'd Sugar, and exhibit a ſpoonful now and then.

So much for internal Remedies. Externally ſome are wont to apply Cataplaſms to the Palms of the Hands and ſoles of the Feet; as in the caſe of Watchings, Deliriums, Pains, *&c.* Take of freſh Rue Leaves, two or three handfuls; Radiſh Roots ſlic'd, in number two or three; Salt, a handful; of the ſtrongeſt Yeſt, two ounces; with Rue Vinegar, make a Cataplaſm to be applied as above.

The juice of River Crabs may be applied in like manner, or by way of Epithema to the Fore-head. When the Mouth and Head are much affected, 'tis not improper to open the Vein under the Tongue, or the Vein in the Fore-head, or to apply Leeches behind the Ears. The application of convenient Liquids to the Fore-head and Temples is alſo not improper. As,

Take of the Water of Dill, or of Roſes, or of Elder Flowers, or of Vervain, two ounces; Apoplectic Water, half an ounce; Philonium Romanum, or Requies Nicolai, or Treacle, a dram. Mix and apply it warm to the Fore-head and Temples, with a Linen Cloath.

Take of white Poppy Seeds, two or three drams: Henbane Seeds, half a dram; Water of Frogs ſpawn, three ounces; Houſe-leek Water, Night-ſhade Water, and the common Hypnotic Water, of each an ounce. Make an Emulſion. To which add ſix or ſeven grains of Camphyr; and the Juice of River Crabs. Mix for an Epitheme to be us'd as above. In Deliriums, Camphyr is a ſovereign Remedy, but in the caſe of watchful Slumbers it ought be to cautiouſly us'd.

Take

Take of Betony Water, Elder Flower Water, and the Water of Red Poppy Flowers, of each an ounce; expreſs'd Juice of River Crabs, three ounces, Spirit of Wine camphoris'd, three drams. Mix for the above mentioned uſe.

Take of the Ointment of Alabaſter, or of Poplar, three drams; expreſs'd Oyl of Nutmegs, half a dram, or a dram; Camphyr, ſix grains; Philonium Romanum, or Venice Treacle, half a dram. Mix, and anoint the Fore-head and Temples.

If the Head be much oppreſs'd, or if the 'foremention'd Symptoms be occaſion'd by the ſtopping of an external Eruption, bliſtering Plaiſters may be applied to the Arms and Thighs, and ſharp Clyſters injected.

As for the particular Symptoms of a Prunella, *viz.* the rednes, heat and roughneſs of the Tongue, *&c.* Let the Patient take a convenient quantity of the following mixture, and hold it in the mouth.

Take of the Seeds of Quinces, of Mallows, of Fleawort, of each two drams; with Water of Frogs ſpawn, make a Mucilage, to which add Sal-armoniac, a dram; compound Houſe-leek Water, two ounces; Juice of River Crabs, an ounce; mix, *&c.* Nitre may alſo be added, or mix'd with the Decoctions of cooling Herbs. As,

Take of the Leaves of Self-heal, Willows and Strawberries, Barley not bruis'd, of each a handful. Boyl them in Water, and add to a pound of the ſtrain'd Liquor one ounce of the Syrup of Mulberries, and half a dram of Nitrum Antimoniatum. Mix for a Gargle. Or,

Take ſix River Crabs, bruiſe them with Rasberry Vinegar, and expreſs the juice; to which add juice of Houſe-leek, three ounces; Rob of Nuts, one ounce; Nitrum Antimoniatum, a dram. Mix and anoint the Tongue. Or,

Take of Houſe-leek Water, a pound and a half; juice of River Crabs four ounces; Sal-armoniac purify'd, a dram and a half. Mix, and make a warm Gargle. Sal-armoniac and Nitre are noted Ingredients in all Gargles of this Nature. Water, Spirit of Wine and Hony, are very uſeful for the ſame purpoſe, in malignant Fevers, attended by a roughneſs and Drynoſs of the Palate, without any ſlimy cruſt. Freſh Lard, or Butter, or juice of Rapes boyl'd to a Syrup, are likewiſe very proper to be laid on the Tongue in ſuch an extremity.

In continual periodical Fevers, regard muſt be had to the Paroxyſms, by exhibiting before the hour of their invaſion fix'd

fix'd Antimonial Powders, Coral, Crabs Eyes, vitriolated Nitre, Salt of Carduus Benedictus, *Poterius*'s Antihectic; and by forming compositions of the Acid and Earthy Ingredients, and varying them according as the Symptoms require.

Semitertian Fevers ought to be treated in the same method; only we must remember to vary it according as the Symptoms are slow or acute, favourable or malign. If they are attended by inflammations of particular parts, especially such as are very sensible, and of the nobler Character, let these be carefully accounted for. Absorbent Alcali's are proper for vanquishing the shivering and shaking; Vomits are convenient in all cases; prevailing heat is abated by such Medicines as render the Body soluble, and promote a breathing sweat; inflammations are appeas'd by Diaphoretics: And when the Fever moves slowly, cleansing and attenuating Salts, such as Sal-armoniac, Arcanum Duplicatum, *&c.* are of peculiar use.

In a Causus or burning Fever, Nitre dissolv'd in the ordinary drink; and Laudanum Opiatum cautiously administred, effectually abate the violence of heat.

Lipyria's must be treated after the method of inflammations, of which elsewhere. In melting Fevers, the sharp humor must be corrected by temperate Medicines, or absorbent Powders mix'd with Acids, such as Diaphoretic Antimony, seal'd Earth, *&c.* mix'd with the juices of Corans, Barberries, Quinces, Citrons, Cherries, *&c.* *Silvius* recommends the dulcifi'd Spirit of Salt, others the tincture of Blood-stone; some Camphyr, others Diascordium mixed with juice of Citrons.

Symptomatical acute Fevers, are such as follow other Diseases, and disappear upon their removal. If they retain to Wounds, the following mixture is of Catholic use.

Take of Hyssop Water, two ounces; Fennel Water, an ounce; Spirit of Treacle, three drams; distill'd Vinegar of Wine, three or four drams; Powder of Crabs Eyes, a dram; Syrup of Carduus Benedictus, three drams: Mix them, *&c.* Or,

Take of prepar'd Crabs Eyes, a scruple; Extract of Treacle two grains. Mix and exhibit.

Those occasion'd by inflammations, as Pleurisies, Quinsies, *&c.* are cured by removing the inflammations, of which more elsewhere. If they are caus'd by the extravasation of congealed Blood, they require such Medicines as resolve clotted Blood, *viz.* Diaphoretic Antimony, red Poppies,

Poppies, Chervil, Flowers of St. *John*'s wort, and vulnerary Ingredients.

CHAP IV.

Of slow Fevers.

SLow Fevers are such as do not quickly finish their course; they are accompany'd by mild Symptoms; and terminate by way of a gradual solution, without any notable Crisis. They are for the most part benign; for malignity is akin to acuteness. They are caus'd by the successive mixture of vicious Lymph with the Blood, which is either convey'd immediately to it by the axillary Vein from the Glandules call'd Conglobatæ, that is, gather'd round into a Globe; or empty'd into the Conduit of the Breast by the Glandules call'd Conglomeratæ, that is, roll'd into a heap.

ART. I.

Of Catarrh-Fevers, or such as proceed from the Lymph, separated in the round Globe-like Glandules.

IF the Lymph of the Glandules, seated about the Head and Breast, become sharp and saline, it creates a notable alteration of the Blood and Spirits, a biting sharp heat, tho' not over vehement or intense, and a sense of shooting Pains, Weariness, and as it were Contusions of the Joynts; and being plentifully cast forth about the Brain and Neck occasions a weighty drowsie Head-ach, Defluxions into the Mouth and Lungs, a Hoarseness, and Cough; the usual Symptoms of a Feverish Catarrh.

This Fever seems to be near ally'd to the continual Quotidian Periodical Fevers of the Ancients. In the Evening, when the quantity of vicious Lymph is augmented within the Body by the diminution of the insensible transpiration, the Symptoms, especially the heat, are heighten'd. About Midnight they begin to relent, and in the day-time are sometimes follow'd by a gentle shivering. The Pulse is frequent and swift, pretty large and vehement. The Urine is at first high colour'd, but after two or three days it thickens, becomes muddy and yellowish, and deposites a copious Sediment.

If

If this Fever be Epidemical or Malignant, and proceed from the Contagion of the air, which ſeldom happens, 'tis dangerous, and terminates in mortal Convulſions.

The Indications of Cure divide themſelves into three Branches. 1. To extinguiſh the irritation of the ſolid parts, which provokes the Spirits, and occaſions the effuſion of the Lymph. 2. To qualifie the peccant Acrimony of the Lymph. 3. When 'tis thus qualify'd to evacuate it by convenient paſſages. The firſt is accounted for by Opiates; the ſecond by Volatil Alcalin Salts, abſorbent temperate and thickening Medicines, as the fix'd preparations of Antimony, *Poterius*'s Antihectic, flowers of Sulphur, prepar'd Amber, Oyl of Amber, Spirit of Mother of Thyme, Decoction of Saſſafras, Myrrh, Camphyr, volatile Salt of Hartſhorn, Spirit and volatil Salt of Human Blood, *&c.* The third Deſign is compaſs'd by diaphoretic, diuretic, and expectorating Ingredients; and when the Lymph is well concocted, by ſneezing and chewing Medicines.

Take of Fennel Water, and Water of red Poppy-flowers, of each an ounce and a half; Spirit of Hartſhorn impregnated with Amber, a dram and a half; Eſſence of Opium, Jaw-bone of a Pike, of each half a dram; Syrup of the flowers of red Poppies, half an ounce, or ſix drams. Mix them for a Julep, of which, exhibit a ſpoonful every hour towards evening.

Take of the Spirit of Sal-armoniac aniſated, or of the Eſſence of Amber, two drams; Eſſence of Opium, half a dram. Mix 'em, and exhibit forty or fifty drops, ſome hours before the periodical exaſperation, and reiterate the ſame Doſe at night.

Take of prepar'd Amber, half a ſcruple; choice Myrrh, five grains; volatil Salt of Amber, four grains; Extract of Saffron, two grains; Laudanum Opiatum, one grain; diſtill'd Oyl of Amber, one drop. Mix for a Powder to be exhibited in like manner.

If the Lymph be ſaltiſh, Liquorice, Figs, Jujubes, Barly, Emulſions of Poppy-ſeeds, Opiates, Pills of Storax, and ſuch like, are proper. If hoarſeneſs and a difficulty of ſpeech prevail, give what follows.

Take of Mint-water, two ounces; Cinnamon-water, half an ounce; Spirit of Sal-armoniac aniſated, a dram; Laudanum Opiatum, three grains; Syrup of Raiſins, ſix drams. Mix, and give a ſpoonful now and then.

If

If the Wind-pipe, Gullet and Throat be excoriated, Syrup of Diacodium, Loh of Raisins, and licking Medicines are proper. If a dry Cough molests the Patient, let thickning and pacific Remedies be us'd. As,

Take of the Water of wild Thyme, Water of Carduus Benedictus, of each an ounce; Spirit of Treacle camphoris'd, Essence of Sassafras, of each two drams; Spirit of Hartshorn succinated, a dram; Syrup of white Poppies, half an ounce. Mix them, and administer a spoonful frequently in the Evening.

This method, if insisted on, together with the continued use of the Decoction of Sassafras, will in time conquer the Fever. After the Fever is abated, and the Spirits reduc'd to order, let the Body be loosen'd by *Quercetanus*'s Pills of Ammoniac, or *Crato*'s Pills of Amber. Or,

Take of *Crato*'s Pills of Amber, a scruple; volatile Salt of Amber six grains; Rosin of Jalap, three grains; Extract of Troches Alhandal, one grain; distill'd Oyl of Amber, two drops: with Essence of Sassafras, make Pills.

In order to evacuate the prepar'd Lymph, give forty or fifty drops of the Liquor of Terra Foliata Tartari, twice a day, which is a proper Diuretic; or express'd juice of Radishes with Sugar, which attenuates the Phlegm; or the following expectorating mixture.

Take of Hyssop-water, two ounces; Asthmatic-water, half an ounce; Spirit of purifi'd Gum Ammoniac, two drams; Syrup of Tobacco, four or six drams; *Sala*'s Emetic Syrup, a dram. Mix, *&c.*

In the beginning while the cough is yet dry, temperate thickening Medicines are requir'd, but afterwards when the Cough brings up large quantities of viscous Matter, let cutting expectorating Remedies be us'd. If the Phlegm be notably tough and thick, let Oyl of Amber be apply'd to the Nostrils, or let the Person smell frequently of Spirit of Salarmoniac, or that of Urine, or of Hartshorn. In the last extremity, let the Powder of black Hellebor and white Sugar, with distill'd Oyl of Cloves, be thrown into the Nostrils.

If the pain of the Head be violent, anoint the Crown with Oyl of Amber, or Balsam of *Peru*, or apply the Plaister of Betony soften'd with Oyl of Amber. After the Disease is in good measure subdu'd, the following Decoction is of excellent use for purifying the Blood, correcting the sharpness of the Lymph, fortifying the Lungs, and preventing a Phthisic.

Take

Take of the ſhavings of red Saunders, one ounce; ſhavings of Saſſafras, half an ounce; ſteep them in ſeven pound of Water, for the ſpace of twelve hours; then boyl them till a pound and a half be conſum'd; and add of the Leaves of Ground Ivy, Leaves of Speedwell, Flowers of St. *John's* Wort, of each two handfuls; Liquorice Roots half an ounce; Fennel-ſeeds, ſix drams; bruis'd Currans, three ounces. Boil them into four pounds, ſtrain the Decoction, and exhibit a large draught warm, Morning and Evening.

ART. II.

Of Fevers proceeding from the Lymph of Conglomerate Glandules, or ſuch as are roll'd into a heap.

THe Conglomerate Glandules throw out their Juice into Cavities, from whence 'tis convey'd to the Blood. The chief of theſe Cavities are the Sweat-bread, and thoſe behind the Ears. The former waters the Inteſtines, the latter the Mouth. If their Serum be viſcous, or over ſaline, it occaſions a ſlow ſort of a Fever. All ſlow Fevers are Periodical, as being exaſperated either in the Evening, after the method of Quotidians, or after eating, in the form of Hectic Fevers.

Thoſe which are independent of any other Diſeaſe, are call'd Primary. And thoſe which follow the Corruption of any inward part, or the miſmanagement of a preceding Diſeaſe, are ſtil'd Symptomatical. Tho' the laſt approach very near to the primary form.

Of Independent ſlow Fevers.

They are uſher'd in by a gentle ſhivering, which continues for ſome time, and is follow'd by a mild heat, ſomewhat ſharper in the extream parts. The Appetite is dejected, and after eating, the Stomac and Guts are diſtended, and oppreſt with a heavy pain. Towards the Evening, or after Meals, they increaſe their force; at which time the Pulſe is frequent, and not very large. If the Spittle be notably viſcous, the Mouth and Throat are cover'd with ſlime, and the Perſon moleſted with Thirſt. If the Juice

of the Sweet-bread be likewise over viscid or saline, anxiety invades the Breast, and griping shooting pains beset the Belly; the Pulse is frequent and swift, and in some measure weak and small. The Urine, at first, is high colour'd, afterwards it becomes muddy, and drops a sediment. The Joynts are seized with a weariness and shooting pains, and sometimes the Head with a dull heavy ache.

If the Lymph be simply saline, the Symptoms are fiercer; if it be likewise viscid and tough, they are weaker, but continue longer. The slow Fevers differ from acute ones in this; that the cause of the latter is a volatil sharp Acid, which in the former, is invelop'd with a viscous tenacious Vehicle.

The Original cause is a vicious Digestion, rendring the Chyle viscid, or tending to a sort of Acid saline taste. If the Evening Paroxysms are long, the Strength and Appetit much impair'd, 'tis a dangerous circumstance. The most favourable sort, if not cautiously taken care of, terminates the Cachexies, or Hectic Fevers.

These Fevers are cured by retrieving the lost digestion in the Stomac; correcting the viscidity or sharpness of the Lymph, especially the saliva and pancreatic juice: evacuating the crude Phlegm; and Lymph thus prepared; and mitigating the Symptoms.

If the Breast be oppress'd, let a gentle Vomit be exhibited, or a mild Purgative. As,

Take *Mynsicht*'s emetic Tartar, two or three grains; purifi'd Sal-armoniac, eight grains. Or,

Take of *Ruffus*'s Pills de tribus, fifteen grains; fulminatory Gold, three grains; prepar'd Scammony, Troches Alhandal, of each a grain. With compound tincture of Tartar, make Pills.

In the next place, attenuating Diuretic remedies are proper, as dulcifi'd Spirit of Salt (of excellent use against a Hectic) dulcifi'd Spirit of Nitre, essential Salt of Tartar, Sal-armoniac, Nitrum Antimoniatum, Tartar vitriolated, Terra Foliata Tartari, or its Liquor, tincture of Tartar, Essence of Myrrh tartaris'd, carminative Spirit, Spirit of Sal-armoniac anisated, *Poterius*'s Antihectic, &c.

Take of purifi'd Sal-armoniac, half a dram; *Poterius*'s Antihectic a scruple; make a Powder for two Doses, one in the Morning and the other at Night before the fit. Nitrum Antimoniatum mix'd with an equal quantity of Sal-armoniac; or Arcanum Duplicatum mix'd with diaphoretic Antimony; or

Sal-armoniac mix'd with Galangal and Ginger, are ſucceſsfully us'd after the ſame method.

Take of Mint Water and Fennel Water, of each an ounce and a half; Spirit of Treacle two or three drams; dulcifi'd Spirit of Salt, half a dram, or a whole dram; *Poterius*'s Antihectic, a ſcruple; Syrup of Hyſſop, ſix or eight drams. Mix for two Doſes.

Let the Mouth be gargled with ſmall Beer and Hony of Roſes; or with Water, Vinegar, and purifi'd Nitre; or the infuſion of Holyhoc-flowers, in Water, with a little Spirit of Salt and a convenient Syrup.

The Fever call'd Epiala, in which the inward parts are oppreſs'd with heat, while the external are cold, is, by ſome, referr'd to this head. But 'tis only a combination, or rencounter of either a continual and intermitting, or two intermitting Fevers.

The ſwoonings that ſometimes attend both this and other ſorts of Fevers, are cauſed either by ſome viſcid ſlime, irritating the mouth of the Stomac, or ſome ſharp ruſty humor lodg'd in it. In the laſt caſe, Unicorns horn, or the decoction of Tamarinds in Water, are much approv'd. But if a viſcid windy matter gives riſe to the diſtemper, volatil ſpirituous remedies are proper. Tho', after all, 'tis worth our conſideration, what *Ballonius* remarks upon this matter; *viz.* That many Phyſicians are faulty in giving ſtrong Cordials againſt ſwooning, where purging were more proper.

Of Symptomatical ſlow Fevers.

Theſe Fevers are frequently occaſion'd by a prepoſterous uſe of abſorbents in intermitting and continual Fevers, which fix the heterogeneous Particles, and render the Chyle and Lymph viſcid; or by over feeding in the declination of other Fevers, while the digeſtive faculty is weak; by which means the Chyle is loaded with crudities. They may likewiſe follow other Diſeaſes proceeding from a viſcous Acid. Their Symptoms are the ſame as above, to which we may add, that ſometimes they are accompanied by a looſeneſs, or the voiding of liquid pituitous matter.

The cure conſiſts in tempering the ſaltiſh Acid, attenuating the viſcid matter, and procuring to it an egreſs by vomiting, ſtool, urine or ſweat. They ſometimes proceed from ulcers, eſpecially of the internal parts; retention of the after-birth, a dead Child in the Womb, chronical pains; and

and are cur'd by removing the respective cause by Medicines alotted to that purpose. In general, gentle Vomits and Purges are proper; and in a word the whole series of Medicines prescrib'd for the independent slow Fevers.

Sometimes such Fevers follow an unseasonable use of sudorific decoctions against the Pox, before the Body be evacuated; and are cur'd by vomiting, and the repeated use of Sal-armoniac.

Of Hectic Fevers.

A Hectic is a slow Fever, advancing insensibly. If it be a principal independant Disease, it proceeds from the corruption of undigested Food in the Stomac, immoderate fatigue, sorrow, watchings, want, over-liberal evacuations, excessive bathings, *&c.* Often-times 'tis only a Symptom of other Diseases, and follows the irregular cure of continual and intermitting Fevers, inflammations of the Bowels, Lungs, Mesentery, Womb and Kidneys; the French-Pox, *&c.*

The part affected is not the habit of the Body, as the Ancients fancy'd; but the mass of Blood, and Lymph: Hence the greatest heat is perceived about the Arteries. As for the independent principal sort of Hectics, the Stomac and digestive faculty are the original seat of their cause.

The immediate cause is the indisposition and unequal texture of the Blood, caus'd by the saltish sharpness of the Lymph in the conglobate Glandules, and the viscosity of that in the conglomerate. From whence insue a deprav'd and diminish'd fermentation, a weakness, weariness, deficiency of Spirits, and the whole train of Hectic Symptoms. The saline and viscid Blood is render'd unfit for nourishing the parts; and after eating, when the thin readier part of the fresh Chyle dilutes the Blood, and disengages its Salts, the Pulse is a little enlarg'd, and the heat augmented; but some time after, they sink again to their ordinary pitch. And the coarse remains of the Chyle, are frequently voided by Night-sweats, as having received a vicious tincture in the Stomac from the Saliva, and being upon that account, equally disagreeable to the Blood and solid parts.

As for the remote causes. Fatigue and labour, watchings and care exhaust the Spirits, and the watery vehicle of the Blood; anger exalts the bilious Salt, which joyning with the Acid, acquires a saline acrimony; grief and sorrow increase the Acid, which joyning to the urinous Salt, becomes

dull and unactive; indigested crudities in the Stomac, or the want of Food, occasion a stricter union between the Acid and urinous Salts, and their mutual degeneracy into a third sharp saline Body; Ulcers both internal and external, corrupt the Blood by vertue of their sharp saline matter; continual and intermitting Fevers, attended by plentiful sweats exhaust the dewy watry part of the Blood; or the unseasonable use of absorbent earthy Powders, administred for their cure, destroys the ferment of the Stomac, and increases the acrimony of the Blood. Thus they all conspire to render the Blood and Lymph saltish or viscous.

There are three essential signs of a Hectic Fever. 1. An obscure insensible heat, increasing after eating. 2. The successive Consumption of the Body. 3. A swift, frequent, small weak, and oft-times a hard Pulse. To which we may add in some cases Night-sweats, the falling off of the hairs, an universal wearines, inward heat, and averseness to sleep in the morning. If ashy belchings precede the appearance of these Symptoms; they serve for a confirmation. In the beginning of the Disease the Urine resembles that of healthy Persons, unless the Stomac be much deprav'd, in which case 'tis white, pale, and thick; afterwards when the appetite and digestion are in a manner quite abolish'd it becomes thin, transparent and high colour'd; and when 'tis form'd into a perfect Consumption, a fat oyly crust, resembling Cob-webs, swims on the top. But we ought carefully to distinguish between the real fat crust, which is usual in continual and intermitting Fevers, and proceeds from the excessive heat which melts the internal fat, and is always uniform as to its colour and appearance; and the apparent crust, familiar to Hypocondriac and Scorbutic Persons which is nothing else but the concretion of vicious Salts, and when the Chamber-pot is a little inclin'd, appears green or parti-color'd like a Peacocks Tail. In the beginning of a Hectic the Belly is costive; but when 'tis further advanced, and the Stomac and digestive faculty quite gone, they are molested with a Looseness, which, together with melting sweats, off-fallings of hair, and unniversal Consumption of Body, at length finishes their days.

A perfect Hectic Fever may be considered in its several degrees. 1. When the Nutritious Juice is dispers'd, and mis-applied. 2. When not only the simple Nutritious Juice but the fat, and what was already appropriated to particular solid parts, is melted down and consum'd. 3. When be-

sid

ſides theſe Symptoms, the Fibres of the ſolid parts are manifeſtly dry and wither'd.

The laſt degree is incurable. If a Hectic be occaſion'd by diſorders of the Bowels, or internal Ulcers; if it follow continual or intermitting Fevers, or chronical Diſtempers; if the Hairs fall off, and the Perſon be old, or moleſted with a Looſeneſs or Lienteria, attended by a ghaſtly Countenance, and ſwellings of the Feet and Legs; they are all fatal Symptoms, eſpecially the laſt three.

If it be a principal independent uncompounded Hectic, the direct Indications of Cure are, to qualifie the Acrimony of the Blood, and Acid Viſcoſity of the Lymph; and to corroborate the Stomac. For which purpoſes obſerve. 1. That Bleeding, Purging, or any Evacuations are improper; unleſs the firſt Paſſages be ſtuff'd with Crudities, for which a gentle Laxative is allowable, but in a ſmall Doſe; by reaſon that Hectic Perſons are very eaſily Purg'd. 2. If it ariſe from the Stomac, as it frequently does, Vomits, and the uſe of Elixir Proprietatis are very effectual. 3. That by all means Looſeneſſes and exceſſive Sweats muſt be curb'd; the former by Quinces, red Roſes, Chalybeat Milk, *&c.* The latter by Opiates given at night in ſmall Doſes. 4. That all ſweat things, Sugar, Hony, *&c.* ought to be cautiouſly avoided, by reaſon that they are offenſive to the Stomac, and impart a viſcidity to the humors of the Body.

If the Fever be Symptomatical, a particular regard muſt be had to the principal Diſeaſe, and above all to the Stomac. If it follow a continual or intermitting Fever, a Vomit, if convenient, may be adminiſtred, and after that there's nothing better than Sal-armoniac, and *Poterius*'s Antihectic.

If it follow an Ulcer of any internal part, vulnerary Sulphureous Medicines are proper, eſpecially in the Balſam of Sulphur prepar'd with expreſs'd Oyl of Almonds (diſtill'd Oyls are too ſharp) or, this Balſam thus prepar'd may be mixed with a little Oyl of Aniſeeds. Turpentine diſſolv'd in the yelk of an Egg, or human Fat, or the Decoctions of vulnerary or pectoral Herbs, are likewiſe proper.

After the principal Diſeaſes, and the ſtate of the Stomac are taken care of, the Hectic Fever it ſelf muſt be accounted for, by exhibiting temperate attenuating Medicines. The eſſential Salt of May-dew, or its Spirit, with the Flowers of Violets, Borrage, and Bugloſs infus'd in it; the Phlegm of Vitriol that comes over before the Spirit, if it be rectified, the Juice or Dew which ſticks to the Herb called Roſaſolis;

the juicy fat Herbs, Fruits and Seeds, such as, House-leek, Plantain, Succory, Marshmallows, Lettuce, Purslain, Borrage, Bugloss, Fistic Nuts, sweet Almonds, Sebestens, the four cold Seeds, white Poppy Seeds, and especially Currans or Raisins, whether by way of Pulp, or Decoction with Sassafras, China and Elecampane Roots; or fermentation with Wine, are all noted specifics for this purpose. Crabs Eyes and Pearl are sovereign Antihectics, if we could resolve 'em into their primitive milky Liquor from whence they sprung. Terra Foliata Tartari, and its Liquor well prepar'd, is likewise of good use. Antihecticum Poterii is a noble Medicine, if it be very well separated from the Sulphur of the Tin. As thus,

Take five parts of purify'd Tin, and four parts of the Regulus of Antimony. Melt and fix them with triple the quantity of Nitre. While the mixture stands melted, stir it with a wooden Spatula, that by so doing the Sulphur of the Tin may evaporate. Afterwards dissolve the mixture, and reserve for use the white Powder that sinks to the bottom.

Diaphoretic Antimony, mineral Bezoar, Ivory, Coral, mix'd with Sal-armoniac or Arcanum Duplicatum, or with *Mynsicht*'s magistery of Lead, or Sugar of Lead, are very convenient, where the heat is more intense. Some give thirty drops of the Antiphthisical tincture prepar'd from Sugar of Lead, and Vitriol of Steel. Allum, or its Spirit, mix'd with Spirit of Wine, is much applauded. Spirit or Oyl of humane Blood are recommended by Mr. *Boyle*. If grief or any passion of the Mind threaten a Hectic, give twice a day forty drops of the tincture of Coral with Spirit of Stags heart.

Some receive great benefit by a Milk Diet of Womens, Asses, Goats and Cows Milk. But it ought to be commenc'd before the strength is very much impair'd, or the digestion lost. In a word, 'twill be proper to mind these cautions. 1. That the Hectic be not attended by a putrid Fever, or a Heach-ach, or distention of the Hypochondria, for a foul Stomac, and weak digestion. 2. That while Persons use Milk they eat or drink little else. 3. That all Acids be avoided, and a little Sugar added to the Milk, to prevent its curdling. 4. That the Milk be taken warm, and with a fasting Stomac, either by sucking it from the Breasts, or drinking it when just milk'd, for fear of any alteration from the Air. 5. That the Physician ought to try first if the Milk Diet agree with the Patients constitution; as after a gentle purgation let him

him exhibit three or four ounces of Milk, and if there insue no sense of weight about the Stomac, Hiccough, Squeamishness, increase of heat, or acceleration of the Pulse, he may exhibit a pint every Morning and Evening. And after drinking of it, the Patient must not sleep or use violent motion.

The Food of Hectic Persons must be temperate and juicy; as Broth, decoctions of Rice or Barley, Pullets, Capons, Hens, Ducks fed with Frogs and Cockles, Snails fed wit Sugar and Meal, and boyl'd in Hen-broth; juice of River-Crabs made up with Butter, or mixt with the Oyl or Decoction of sweet Almonds; Oysters, if the Stomac be able to digest 'em, and the appetite covet 'em; Eels, *&c.* But under a Milk Diet, let the Patient abstain from Meat.

CHAP. V.

Of Milignant Fevers.

A Fever is call'd Malignant, when 'tis attended by more dismal Symptoms, than its visible cause is wont to produce. Malignity is not inseparably united to contagion, there being some contagious Diseases that are not malignant, as the Itch, *&c.* and *è contra.* Oft-times it lies latent in the Body for three or four days, till the Season of exhibiting Antidotes be over; upon which account, a Physician ought to be very watchful in the beginnings of Fevers.

The Symptoms which lead us to the discovery of a latent malignity, are these following: a sudden prostration of strength and the appetite dejected, while the other functions are regularly performed, stubborn Watchings without any anxiety, if the head be only affected; but if the Stomac and Breast be disordered, they are attended with a great perplexity, tossing to and again, sometimes the whole Body, sometimes only an Arm or a Leg; to which symptom Deliriums and Convulsions frequently succeed. The Urine resembles that of healthy Persons; or, if by vertue of Medicines, or otherwise, it happens to thicken, yet it still continues transparent, and has little or no sediment, unless it be a yellowish clot of Chyle voided along with it. The pulse is at first in seeming good order, of a sudden it becomes weak, small, oft-times hard; and towards the heighth of the Fever, unequal. At first a gentle shivering may usher

er in the Fever; to which ſucceeds a very moderate heat externally, tho' in the mean while they are burnt up within, which is a fatal ſign of internal Inflammations. And notwithſtanding the moderation of the heat, an unquenchable thirſt moleſts 'em, and their Tongue is dry and rough. Or if on the contrary, they be extream hot, and withal inſenſible of thirſt, 'tis likewiſe a ſign of malignity. Theſe are the moſt common Symptoms. Sometimes the Fever is attended by violent Head-aches; difficult reſpiration, eſpecially upon the point of cuticular Eruptions; ſtinking Excrements, and laſtly, Eruptions of Spots, Puſhes, Wheals, *&c.* According to which it undergoes ſeveral denominations. Sometimes the malignity is arriv'd at that height, that the external Parts are corrupted and ſeiz'd with Gangreens, the Perſon poſſeſs'd with an invincible averſion to all manner of Liquors, *&c.*

Malignant Fevers admit of ſeveral degrees. The firſt is when the occaſional ſharpneſs and degeneracy of the febril ferment, converts a benign Fever into a malign one. 2. When the ferment is not only ſharp, but contagious, or Epidemical. Now the original of Contagion, is an active ſpirituous ferment, eaſily communicable to the Spirits, an capable to propagate it ſelf by a fermeneative motion, in matter fit for its purpoſe; which, in company of the Spirits exhal'd from the ſick Perſon, pitch upon thoſe whoſe Conſtitution and Pores gives the eaſieſt admiſſion, ſuch as the Relations of the ſick Perſon, weak People, *&c.* The manner of its reaching and inſinuating into ſuch Perſons, is either by immediate Contact, or in the Vehicle of Food, Cloaths, *&c.* or that of the Air convey'd into the Lungs, where it debauches the Spirits circulating that way, and in paſſing the Mouth, adulterates the Saliva, which immediatly affects the moſt ſenſible Orifice of the Stomac: Hence the firſt, and moſt diſmal Scene of tragical Symptoms is laid in the Stomac. 3. When the ferment is become peſtilent. And, 4. When 'tis form'd into a direct Plague.

The cauſe of malignity, aſſign'd by *Willis*, is the coagulation of the Blood, and that by *Sylvius*, is a ſharp volatil lixivious Alcali, deſtroying the Acid Sulphur of the Blood, and conſequently, its conſiſtence: But the vicious fluidity of the Blood attending malignity confutes the former, and the natural inactivity of Alcali's, the kown power of volatil Acids in extinguiſhing the animal Spirits, and galling the nervous Syſtem; and the Antidotal vertue of Alcali's, both

volatil

volatil and fix'd, such as Camphyr, Myrrh, and the absorbent Powders, overturns the latter Hypothesis. 'Tis therefore a sharp volatil Acid that causes malignity, partly by dissolving the texture of the Blood, and disposing it for Putrefaction, and generation of Worms, observable by Microscopes; partly by irritating the Stomac, Brain and nervous parts, and partly by extinguishing both the vital and animal Spirits.

That the Spirits are immediatly attack'd as well as the Blood and Humors, is made to appear by the symptoms of sudden Weakness, contracted Pulses, Watchings, Deliriums, *&c.* and by the force of imagination in propagating the Contagion. Nay, oft-times the Spirits are principally assaulted, and the Humors only mediately, thro' their sides. Now it will be of use in malignant Fevers, to distinguish nicely the original trouble of the animal Spirits and nervous System, from that of the vital Spirits and Mass of Blood. The Symptoms of the former, are an unquenchable Thirst, a rough and dry Tongue, a quick and small Pulse, attended by a moderate heat, Anxiety and Unquietness (proceeding from the Stomac) a melting Looseness, rotten smell of Excrements, and the thin fluid consistence of the Blood: Those of the latter are a violent heat of the Fore-head; the hardness of the Pulse, without the trouble of any membrane in the Body; or a laudable Pulse attended by extream weakness; the prostration of the Appetite, Squeamishness, Vomitings, stubborn Watchings without any visible Cause, the dryness or roughness of the Skin, and the unaccountable thickness and crudity of the Urine.

The remote Causes of Epidemical Malignity are; approaching to corrupted things, as dead Carcases, *&c.* The Salt Subterranean Fumes, Earth-quakes; a preceding famine; eating of corrupt Food, as of putrify'd Summer Fruits, and drinking rotten Water, *&c.* Inwardly the prevalent acidity of the Juice of the Pancreas may so exalt the Bile to a rusty sharp quality, that it becomes maligant. Thus benign Fevers frequently degenerate into malign ones; and Scorbutic or Hypocondriac Persons, who are stuff'd with a fix'd Acid, are not so much oppress'd with malignity or a Volatil Acid, as others.

The prognostics of malignant Fevers are very uncertain, and fallacious. A large and equal Pulse is a good sign. A quick and small creeping Pulse is a bad sign; as also an unequal Pulse; tho' neither the inequality nor intermission, nor

small-

ſmallneſs are ſo fatal in malignant as in benign Fevers. If doating continue after ſleeping and be not attended by Sweats; if the Eye repreſents falſe Colours of Objects; if the Urine, after apparant Concoction, become Crude again; if it ſtink, if it appear fat, oyly, black or livid, with a blackiſh Sediment: If a Looſeneſs happen eſpecially after eruptions upon the skin; if the Excrements or Urine are Bloody; if the Excrements, Serum or Blood, ſend forth a heavy ſmell; if a redneſs of the Face, Heat and Watchings be attended by a dropping at the noſe; if the Tendons ſtart; if a tickling or pricking Pain invade the Palms of the Hands; if the Perſon attempts to catch Flies, or pick the Bed-cloaths; if any of theſe Symptoms appear, they threaten Convulſions or Death. Deafneſs, tho' it be look'd upon as a diſmal Symptom in the beginning of acute Fevers, meets with a favourable conſtruction about the height of Malignant Fevers. The eruption of Bubo's and ſwellings of the Glandules frequently infer the ſolution of the Diſeaſe.

The Cure is either deſign'd for preſervation from imminent danger, or removing the preſent Illneſs. Diſtill'd Vinegar, Camphyr and Alexipharmacal Ingredients are proper Preſervatives. As for the proper Cure of malignant Fevers, 'tis perform'd by expelling the poyſonous ferment, and fortifying the Spirits and Humors, in order to promote the expulſion. To this purpoſe, Sulphur, abſorbent Antimonial Powders, Camphyr, Vinegar, and Acid Juices; precipitating Powders ſuch as the friable parts of Animals, mix'd with Alexipharmacal Ingredients, ſuch as Zedoary, Ivy-Berries, Juniper and Bay-berries, Myrrh, Angelica, Gentian and Saffron, with Opium and Sudorifics, are very proper. But in order to a regular uſe of 'em, let us mind the following Cautions.

1. Vomits, eſpecially the Infuſion of Vitrum Antimonii, are of admirable efficacy in the very beginning of Malignant Fevers; eſpecially when they're attended by Anxieties in the Breaſt, or proceed from an internal corruption of the Humors. But the Seaſon of exhibiting them muſt be nicely weigh'd; for if Nature be already endeavouring any other evacuation, eſpecially through the Skin, they are out of ſeaſon.

2. Sudorifics are juſtly look'd upon as the baſis of the Cure; but they ought to be proportion'd to the malignity of the Diſeaſe, and ſtrength of the Patient. If the Maligni-

ty

ty be of a moderate Character, 'tis advisable to begin with absorbents at first. Indeed a violent malignity requires powerful Sudorifics; but care must be taken that the Patient be not stifled with weight of Cloaths. And those of the sweating Tribe that are Aromatic and Oyly, are only proper in the beginning, or during the increase: Towards the height, or when the heat is violent, 'tis not amiss to exchange 'em with fix'd Powders, or at least, to qualifie 'em with Acids, such as the Spirit of Nitre, the vegetable Acid Juices, *&c.* Camphyr is a Sudorific never to be omitted, unless it be prohibited by a peculiar Antipathy, as in some Women, and studious Men.

3. During the time of sweating, or immediately after it, let Acid mixtures of the Juice of Citrons, and especially Spirit of Nitre, *&c.* be exhibited. They retrieve the exhausted Spirits, and procure a due consistence to the dissolv'd Blood, and ought always to be imploy'd for a Vehicle to Venice Treacle, and such like Compositions.

4. Opiates are of admirable use for promoting Sweat, which is frequently hindered by anxiety and unquietness. Let 'em be mix'd both with Sudorifics, and with the Acid mixtures exhibited after sweating; but their proper season is during the increase; for towards the Crisis they ought to be avoided.

5. The Cure of malignant Fevers varies according to their respective Causes. If they proceed from external Contagion, fierce Sudorifics are required. If from the internal corruption of the Humors, they ought to be more temperate, and rather absorbent. If the Animal Spirits are the principal seat of the Malignity, subtil, volatil, penetrating Ingredients, mixed with Narcotics, are proper. If the Blood claim that Character, they ought to be temper'd with Acid Vehicles. The malignity of the Blood is, for the most part, attended by eruptions of Humors at one part or other; that of the Spirits by Deliriums, Watchings, Convulsions, *&c.* and a tolerable Pulse.

6. Malignant Fevers are frequently complicated with continual burning ones; in which regard must be had to the boiling heat of the Blood, by insisting more on moderate Acids, and fixed absorbents, especially those of Antimony, and qualifying the volatil oyly Specifics.

7. The above mentioned Symptoms relating to the Tongue, Hands and Tendons ought always to be inquir'd after; as also the condition of the Eyes, for if they are rutilant and fiery, or fierce, they threaten Deliriums.

8. There

8. There is nothing more fatal than a Looſeneſs; and all Artificial Purgations are pernicious, eſpecially if the Diſeaſe came by Contagion, or if Nature endeavour Cutaneous Eruptions, or if the force of malignity ſurpaſs that of the febrile effervescency. If the firſt Paſſages be ſtuff'd, let temperate Clyſters be injected, and even thoſe but very cautiouſly. In the declenſion of the Diſeaſe a gentle Laxative is not amiſs.

9. Blood-letting is highly pernicious, eſpecially if the Diſeaſe came by Contagion, or tend to cutaneal Eruptions. Sometimes if the malignity be weak, and the Blood boyl high in a Plethoric young Perſon, accuſtomed to bleeding, it may be allow'd; but with a great deal of Caution and Judgment.

10. Bliſtering Plaiſters are very uſeful. They're appli'd to the Legs and Arms, and in caſe of ſleepy Symptoms to the nap of the Neck. If the Animal Spirits are much afflicted, or if the Eruptions deſign'd by Nature advance but ſlowly or retire afterwards, they are of ſingular uſe. *Stephanus* adviſes us not to be over haſty in applying 'em, till Nature have diſcover'd her deſign, and then if ſhe be weak to interpoſe their help. Their increaſe or rather beginning of the height is a proper time to apply 'em.

11. The Diet muſt be thin; neither are Victuals to be offer'd unleſs the Appetite require 'em. For drink, let Water be boyl'd with a third part of Rheniſh Wine, and mix'd with the Juice of Citrons and Gelly of Hartſhorn. Or let Whey be ſharpen'd with the Juice of Citrons, or Spirit of Nitre.

Having premis'd theſe Cautions, we ſhall next touch at the Specifics, ſome of which are volatil, ſome fix'd. The volatil are either lean and thin, ſuch as the Spirit of Sal-armoniac, the Spirits and volatil Salts of Hartſhorn, of Vipers, of Tartar, of Urine, of Amber, *&c.* Or Oyly and Aromatic, ſuch as Camphyr, Elecampane, Birthwort, Rue, Galangal, Mary-gold, Orange peel, Germander, Caſtor, Vipers, Baum, Zedoary, leſſer Centory, Rob of Juniper and Elderberries; the diſtill'd Oyls of Amber, Camphyr, Hartſhorn, and Tartar; Eſſence of Treacle; Spirit of Treacle Camphoris'd, and the Eſſences of Aromatic Herbs. The fix'd are Diaphoretic Antimony, Diaphoretic Gold, native Cinnabar, or that of Antimony, above all the fix'd Sulphur of Antimony, mineral Bezoar both Simple and Compound, the Bezoar Stone given to half a dram, or in the room of it the Stone

cut

cut out of a Man's Bladder, seal'd Earth, Coral, Hartshorn, Sulphur, and the preparations of Nitre, *&c.* Some are of a temperate nature, neither properly volatil nor fix'd; such are the Gelly of Hartshorn, the expelling Seeds, *viz.* Those of Carduus Benedictus, Columbines, Cresses, Citrons, *&c.* To which we may add Myrrh, which is a baumy Medicine, of excellent use for covering the Spirits from the shocks of the malign ferment.

From these Simples are prepar'd an infinity of Compound Medicines, such as Venice Treacle, or Diascordium (which is better) Mithridate, Species of Hyacinth, the Powder call'd Saxonicus, *&c.* As for Venice Treacle and such like hot Compositeons, the best way is to exhibit 'em in Acid Vehicles, and mix 'em with fixed Specifics.

Take of Rasberry Water, and that of Water Germander, of each an ounce and a half; Diaphoretic Antimony, half a dram; Cinnabar of Antimony, fifteen grains; volatil Salt of Hartshorn, twelve grains; Camphyr, two or three grains; (or Laudanum Opiatum, a grain or two) Syrup of Carduus Benedictus, an ounce. Mix for two Doses, in order to Sweat. This is to be given in the beginning or increase of the Disease after the general premises. As likewise these following.

Take of Rue Water, and that of Vipers-grass Roots, of each an ounce; of the Mixtura Simplex, a dram; rectify'd Spirit of Soot; half a dram; Syrup of Water Germander, half an ounce. Mix for two Doses.

Take of the Cordial Saxony Water, an ounce; Cinnamon Water, half an ounce; Spirit of Venice Treacle Camphoris'd, two drams; volatil Salt of Hartshorn, a scruple; volatil Salt of Amber, half a scruple; Syrup of Clove Gilly Flowers, half an ounce. Mix and give a spoonful frequently, when Deliriums are threaten'd.

Take of the Water of Vipers-grass Roots, and that of Water Germander, and Vinegar of Wine, of each an ounce; Venice Treacle two drams; Diaphoretic Antimony, two scruples; Camphyr six grains; Syrup of Rasberries, an ounce. Mix for two or three Doses. If the heat be violent exchange the Treacle for Diascordium.

Take of the Water of Carduus Benedictus and that of Water Germander, of each an ounce and a half, fresh Juice of Citrons, six drams; Venice Treacle, a dram and a half; mineral Bezoar, half a dram; Laudanum Opiatum, a grain and a half

half; Syrup of Mint, dulcify'd Spirit of Nitre, a ſufficient quantity. Mix for two Doſes.

Take of the Conſerve of Citrons, and Conſerve of Roſes vitriolated, of each an ounce and a half; Rob of Juniper, half an ounce; Diaſcordium, two drams; Camphyr, a ſcruple. With Syrup of Citrons make an Electuary.

Take of Venice Treacle, a dram; Diaphoretic Antimony, fifteen grains. Salt of Wormwood, half a ſcruple. Mix for a Doſe or two, to be taken in Vinegar of Wine. This is to be given in caſe of great Malignity.

When the Diſeaſe is further advanc'd towards the height, volatile Sulphureous Med'cines muſt be cautiouſly us'd. As, take of Fumitory Water, three ounces; Hartſhorn prepar'd without Fire, two ſcruples; mineral Bezoar, a ſcruple; Extract of Treacle, ſix grains; Syrup of Orange Peel, three drams. Mix for three Doſes. Myrrh may alſo be added.

Take of the ſimple mixture, ſix drams; the Spirit *de tribus* (diſtill'd from Antimony, Sulphur and Nitre) two drams; Flowers of Sulphur, a ſcruple; Fumitory Water, two drams; Syrup of the Juice of Citrons, an ounce. Make a Potion for one Doſe.

The of Diaphoretic Antimony, Cinnabar of Antimony, of each half a ſcruple; volatil Salt of Hartſhorn, four or five grains; volatil Salt of Amber, two or three grains; Camphyr, two grains. Make a Powder. I have ſeen the good effects of this Powder in the caſe of Deliriums, and imminent Convulſions.

Take of Hartſhorn prepar'd without fire, a dram; mineral Bezoar, two ſcruples; ſeal'd Earth and mineral Unicorn, of each fifteen grains; Laudanum Opiatum prepar'd by fermentation, four grains. Make a Powder for four Doſes. Nitrum Antimoniatum, *Poterius*'s Diaphoretic Gold, ſolar and Jovial Bezoar, volatil Salt of Vipers and Myrrh, are proper Ingredients for the ſame purpoſe.

During the uſe of theſe or ſuch like Alexipharmacal Preſcriptions, let Acid Mixtures be exhibited for quenching the Thirſt, and comforting the Spirits after ſweating. As,

Take two freſh Citrons, ſlice 'em. Add of white Sugar, three ounces; Vipers-graſs Roots, two or three drams; Spring Water, ſix pound. Boyl them till two parts of three be evaporated, and ſtrain it for uſe.

Take of *Mynſichtius* his Decoction of Citrons, a pound and a half; Gelly of Harſhorn, an ounce and a half;

Syrup

Syrup of Cherries, and Syrup of Rasberries, of each an ounce: with a sufficient quantity of the Juice of Citrons, make a Julep.

The Syrup of Poppies in case of violent heat is added with good success.

Take of the shavings of Sassafras, six drams; boyl them in Water, to a pound and a half of the strain'd Liquor add two ounces of the Juice of Citrons, an ounce and a half of the Syrup of Citrons, and a sufficient quantity of the Spirit of Nitre, to render it grateful.

Take of the Decoction of Tamarinds with Raisins a pound; Syrup of the Juice of Citrons, Syrup of Rasberries, of each an ounce: with a little of the Spirit of Nitre, make a Potion.

Sometimes the Confection Alkermes, or Diascordium, or Diaphoretic Antimony is dissolv'd in these acid mixtures.

During the time of Sweating some apply a little Loaf hot from the Oven, the under crust being par'd off, and the Heart excavated and fill'd with Treacle and Wine; thus they apply it the Navel to attract the Malignity.

If the Patient bleed at Nose, which is a fatal Symptom, apply a dry Toad to the Arm-pits; or, take of Vervain Water, three ounces; Spirit of Wine Camphoris'd, an ounce; Opium, five grains. Make an Epithema for the Forehead; which is also of use to prevent Head-aches and Deliriums. If the Stomac be much disorder'd apply to it a Plaister of Tacamahac, Balsam of *Peru*, and Venice Treacle. If the Throat and Palate be dry, without any slimy crust, make a Gargle of fair Water, Spirit of Wine rectify'd, and Honey.

If a Looseness attend a malignant Fever, exhibit two scruples of the red Powder of *Pannonia*; or Venice Treacle mix'd with Opium and fix'd Sudorifics. Prepar'd Hartshorn, Bole Armenic, seal'd Earth, mineral Unicorn, are also proper to be added to Alexipharmacal Ingredients.

If a malignant Fever be attended by Heartburnings, and gnawings of the Stomac, violent Head-aches, Watchings, Deliriums, and a grievous Prunella, 'tis call'd the *Hungarian*, or Camp Fever, and is highly Contagious. Vomits commence its Cure; which ought to be follow'd by Acid Juleps, and fix'd or meagre Sudorifics. The *Hungarians* are wont to Cure it by rubbing the Body with a Root of Garlic soak'd in Spirit of Wine, and bruis'd; and then covering up the Person in order to Sweat. The Prunella is accounted

for

for by waſhing the Mouth with a mixture of Houſe-leek Water, Juice of Houſe-leek, and Sal armoniac.

Some malignant Fevers are accompanied by Spots in the Skin reſembling Flea-bitings. Theſe Spots are alſo compatible to ſome Tertian and Scorbutic Fevers that are not tinctur'd with Malignity. When they attend malign Fevers, they are uſher'd in by theſe Symptoms, *viz.* an univerſal bruiſing, tearing Pain and Wearineſs, a ſudden and unaccountable decay of ſtrength, and a moderate heat, with little or no Sickneſs at firſt; follow'd by heavy pains of the Back and Head, Watchings, Unquietneſs and anxiety; towards the Evening they grow worſe, and continue ſo all Night. In the beginning of the Diſeaſe they Sweat eaſily; during its further progreſs they Sweat but little or with great difficulty, and in the height of the Diſeaſe, none at all, either naturally or artificially. About the fourth, ſeventh or tenth day, the Spots break forth in the Breaſt and Shoulders, afterwards on the Belly and Legs, and at length in the Arms, the Face being for the moſt part free. In the declenſion or even in the height of the Diſeaſe, ſometimes there infuſes a comfortable ſalivation. The Spots are diſtinguiſh'd from Flea-bitings by this mark, that theſe have a red point in their middle, which the Spots have not, and that they diſappear by the application of the Meal of Beans with Vinegar.

If theſe Spots are many, large, broad and of a high Colour, 'tis a good ſign. But if they are few in number, apt to retire, or of a yellow, green, blew, or above all of a black Colour, 'tis a deſperate Caſe. If they break out before we can diſcover any ſigns of Concoction, or after their eruption are follow'd by a bleeding at the Noſe, 'tis an ill Omen. If during the firſt days of the illneſs the Perſon walk'd about and expos'd himſelf to Cold, 'tis an aggravating Circumſtance. In general, all ſpotted Fevers are ſlow and leſs acute than others.

The cauſe is the ſame, as that of other malignant Fevers, as alſo the general Cure. What peculiarly belongs to ſpotted Fevers is couch'd under the following Cautions.

1. Vomits are of excellent uſe. Purgation and oft-times injecting of Clyſters is noxious, if the Spots are already out. 2. Blood-letting is fatal. 3. In the beginning and increaſe, Venice Treacle, and ſuch like compoſitions, may ſafely be exhibited. But towards the height thoſe of a fix'd Quality are preferable. 4. If the eruption be Symptomatical, it ought not to be promoted by Sudorifics, but rather moderated by

Acid

Acid Antidotes. If 'tis Critical, following the signs of Concoction, and affording some relief to the Patient, it ought to be gently incourag'd by Emulsions of the expelling Seeds. 5. A Looseness following the Eruption ought to be cautiously handled. 'Tis not fit to stop it directly; but only to persist in the use of sweating Medicines; or if it occasion the retreat of the Spots, then we may adventure to curb it gently. 6. Blistering Plaisters are of Sovereign use, especially if the Spots disappear unseasonably. 7. Wine moderately taken is not improper.

There is another sort of malignant Fever, call'd Purpurata, which approaches to the nature of acute Fevers, both in the time of its Crisis, and in the Symptoms that usher it in. Under the increase of the Disease the Person is seiz'd with a heat, and pricking Pains all round the Breast, Shoulders, Neck, *&c.* and the Skin becomes rough and red, and sometimes itches, and in the height of the Disease is cover'd with little miliar Eruptions, which are apt to strike in upon the least Cold whatsoever. And in the declension of the Disease fall off like Scales. This Disease frequently attacks Women in Child-bed, perhaps by reason of the suppression of their Lochias. It seems to partake much of a Scorbutic nature, and therefore Antiscorbutics mixed with other Antidotes are very proper. In fine, its Cure is the same as that of other malignant Fevers, to which we may add, that all Purgatives, or Clysters, or the least degree of Cold, ought to be nicely avoided.

CHAP. VI.

Of the Small Pox and Measles.

THE Small Pox are not always malignant, as being only an effect of Nature's indeavours to purify the blood from the vicious remains of Milk suckt from the Breasts in our infancy, and curdled into an Acid. Some fancy them to proceed from the Corruption of Menstrual Blood, with which the Child is tainted in the Womb. But the weakness of that thought is sufficiently evinc'd, by the unequal propensity of Children to this Diase, and their being nourish'd with Chyle in the Womb.

That the corruption of the Milk, and its degeneracy into an Acid, is the cause of the Small Pox may be infer'd from

the Analogy that intercedes betwixt them and the Scrufie ſtinking Ulcers in the Heads of Children, caus'd by vicious Milk.

This Acid cauſes the Convulſions and tearing Pains of the Back and other Membranes of the Body, the piercing of the Skin, Suppuration, and in ſhort, all the Symptoms of the ſmall Pox, whether common or uncommon. Now the order of the common Symptoms is as follows.

A gentle ſhivering is follow'd by a violent heat, and heavineſs of the Back and whole Body, piercing beating pains in the Loyns, a ſwelling, redneſs and ſcorching Pain of the Eyes, and an aptneſs to ſhed Tears, or void Serum, and ſometimes a weighty Pain in the Head; or a dry Cough, with a quick, frequent, vehement and hard Pulſe. The Reſpiration is oft-times difficult, the Throat rough, and the Voice hoarſe. The Perſon is diſquieted, watches much, or dreams of uncouth things, or doats and undergoes ſome Epileptic motions. Sometimes he vomits or bleed at Noſe, which is a bad Symptom in the height, tho' not in the beginning of the Diſeaſe; or piſſes Blood; or is ſeiz'd with a Diabete or a Looſeneſs. The Urine is for the moſt part clear, by reaſon that the Serum moves towards the ſurface of the Body. Sometimes indeed when the Blood and Humors boil high within, 'tis muddy or white, and drops a Sediment like Bran.

Of all theſe ſigns, there are three that are moſt certain, *viz.* a Pain in the Loyns or Back, and a diſtending Pain and watrineſs of the Eyes.

Theſe Symptoms gall the Patient till the third or fourth day, that little red Spots appear; and then if they advance regularly, the Symptoms diſappear. The Spots ſometimes vaniſh inſenſibly in a few days, and are called Meaſles; ſometimes they riſe in the form of red Puſhes, and by degrees become white in the Center, with a purple or livid Circumference. Thus they come to ſuppurate, tho' not without a ſort of renewed Fever, and in the middle void corrupt matter, and fall off like Scales, under the denomination of the Small-Pox.

Theſe Spots or Wheals chiefly poſſeſs the Hands and Face, and bloat 'em up, and frequently leave behind 'em Ulcers in the Head and other parts of the Body; eſpecially if they do not come duly forth, or ſtrike in unſeaſonably: In which caſe an infinity of various ills may inſue.

As for the Prognostics, they are accounted favourable when the Symptoms disappear, or at least remit, upon the Eruption; when they break out speedily, copiously, and all together; when the Pushes are large, soft, pointed at the top, round, separated from one another, of a red colour, becoming quickly white in the middle, and retaining a red Circumference; when they are most numerous in the extreme Parts, appearing about the fourth day, ripening quickly, and finishing their Course by the fourteenth. The dangerous Symptoms are just the reverse of these: To which we may add Pits or black points in the middle of the Pushes, a livid Circumference, the interjection or following of malignant Spots, convulsive motions continuing after the Eruption, moist Hands while the Arms are very dry; the distention and murmuring of the Belly, attended by Anxiety and Unquietness, (betokening the Inflammation of the Intestines) the continuance of the Fever and difficult Respiration, after the Eruption, signifying that the Bowels, Lungs, Midriff, and internal parts are inflam'd and beset with Wheals; violent Pains of the Back, accompany'd by an unaccountable Weakness, and malignant Symptoms; pissing Blood, or voiding Blood either upwards or downwards, Loosenesses and Bleeding at Nose following the Eruption, *&c.* Sometimes indeed Bleeding at Nose in the beginning of the sickness in a large quantity, and without the least Interruption, and ceasing of its own accord, is a favourable Circumstance. Some have observ'd that the Children of Parents, who were Pox'd before Marriage, are always in great danger when attack'd by the Small-Pox. Those who die of this Disease, are seiz'd with Quinsies, or a stuffing of the Lungs, Loosenesses, Dysenteries or Convulsions. If they recover, the Eyes are in danger of being damag'd; the Lungs and Intestines of being ulcerated; the external Parts of Imposthumes; and the whole Body of Obstructions and Cachexies.

The Cure is perform'd by moderating the sharp Ferment, expelling it when corrected, and mitigating the Symptoms. In order to a regular pursuit of these Ends, let's observe the following Cautions.

1. We ought to distinguish the time of Speration from that of Expulsion. During the former the Blood boyls high, and ought not to be spurr'd on by expelling Medicines, (unless the Patient be very weak) but appeas'd and arm'd against the Influeuce of the malign Miasma's, by absorbent fixing Ingredients. But during the latter Alexipharmical and expelling

Medicines, eſpecially Emulſions of the expelling Seeds, ought to be exhibited and perſiſted in till the Puſhes diſappear.

2. During the progreſs of the Diſeaſe, Purges or Clyſters are highly pernicious. In the beginning of the Fever, if it be very high and free of malignity, and if the ſick Perſons firſt paſſages be ſtuff'd, 'tis not improper to exhibit a gentle laxative with ſweet Mercury. After the declination of the Pox or Meaſles, 'tis highly neceſſary to purge with the ſame Ingredients, in order to prevent the influence of the Acid remains.

3. If a Looſeneſs happen after the Eruption, we ought to be cautious of ſuppreſſing it, eſpecially if the Fever be not malignant, and the humors be putrify'd within. In this caſe we ought ſtill to perſiſt in the uſe of Sudorifics, which divert the Humors to the Surface of the Body. In other Caſes a Symptomatical Looſeneſs ought to be ſtopp'd by adding Aſtringents. If it proceed from Worms it's frequently fatal.

4. Blood-letting (in *Germany*) is highly pernicious, unleſs the Patient be of a full Plethoric Conſtitution, and ſeiz'd with a Frenſie; and even then it only takes place in the beginning before the Eruption.

5. Opiates are of excellent uſe for promoting Expulſion, mitigating the pernicious Symptoms of the Nerves and lower Belly; and for incouraging the ſwelling of the Hands and Face, which is a moſt favourable Circumſtance in this Diſeaſe.

6. After the recovery, the Lungs, Throat, Belly and internal Parts ought to be arm'd againſt the influence of the remaining Acid.

7. External Applications for preventing Scars and Pits, are very prejudicial, eſpecially before Maturation. The moſt uſeful External is Bracelets of Amber applied to the Wriſts, which promote the Expulſion.

8. If the Fever be high during the time of Separation, avoid too much heat. If the Patient be weak, and Nature unable to perform its part, Artificial heat is not improper.

9. During the time of Separation the Diet muſt be thin. Wine is improper; the Decoctions of Lentils, or of any ſort of Pulſe, are flatulent and prejudicial. Let Gelly of Hartſhorn be diſſolv'd in ſmall beer, mixt with the Tincture of Columbines, or, in which bag of Columbine and Turnep Seeds is infus'd, for ordinary drinking. For Children let hot Horſes dung be infus'd in what they drink; for it promotes Sweat, and defends the Neck and Throat.

Having

Having premis'd theſe Cautions, the next thing is to take a view of the Materia Medica. For moderating the motion of the Blood, and mitigating the Symptoms of the Breaſt and Belly, and promoting Expulſion, we uſe mineral Unicorn, Diaphoretic Antimony, Cinnabar of Antimony (of excellent uſe for preventing Convulſions) and eſpecially Unicorns horn and Emulſions of the expulſive Seeds, *viz.* The Seeds of Creſſes, Columbines, Turneps, and Carduus Benedictus. To which we add ſome volatil Ingredients, ſuch as the Salt and Spirits of Hartſhorn, Vipers and Human Blood, when the Acid afflicts the Nerves, and the Puſhes break out but ſlowly.

The ſpecific Remedies of greateſt Note, are Myrrh, and Caſtor, or their Eſſences, prepar'd with Spirit of Wine tartaris'd. To which we may add Saffron, the dung of Animals, eſpecially Horſes or Sheeps dung infus'd in Wine: Figs, or their Decoction, to which we add Millet Seeds, to qualifie their looſening Virtue.

Take of Hartſhorn prepar'd without Fire, and Diaphoretic Antimony, of each fifteen grains; Myrrh, half a ſcruple. Make a Powder to be exhibited before the Eruption. If the Patient be troubled with ſhivering juſt upon the point of Eruption, add the Salt of Carduus Benedictus.

Take of Hartſhorn prepar'd without Fire, and Cinnabar of Antimony, of each half a ſcruple; Caſtor, three grains; Myrrh, two grains; volatil Salt of Vipers, four or five grains. Make a Powder to be given after Eruption, or when the Puſhes advance but ſlowly. Or,

Take of Hartſhorn prepar'd without Fire, fifteen grains; ſolar Bezoar, half a ſcruple; volatil Salt of Hartſhorn, five grains; Laudanum Opiatum, half a grain. Mix for one Doſe. In caſe of a Looſeneſs, or Unquietneſs and malignity, add two grains of Camphyr. Or,

Take of Scabious Water, an ounce and a half; Eſſence of Myrrh, a dram; Hartſhorn prepar'd without Fire, a ſcruple; Mineral Bezoar, half a ſcruple; Laudanum prepar'd by fermentation, a grain; Syrup of Carduus Benedictus, three drams. Make a Potion. The volatil Salt of Vipers, or that of Hartſhorn, Camphyr, *Sennertus*'s Bezoardin Powder, Spirit of Treacle, and, in caſe of a Looſeneſs, ſeal'd Earth, may be added by turns.

Take of the yellow part of Orange Peel, two drams; Citron Seeds, a dram; Seeds of Columbines and Corduus Benedictus, Myrrh, of each half a dram; ſweet Almonds, a dram. With Viper-Graſs-water make an Emulſion, and

ſweeten it. If the Patient be much diſquieted, add the Syrup of Poppies and Eſſence of Caſtor.

Take of the Tincture of Tartar, two drams; Eſſence of Myrrh, prepar'd with the Spirit of Sal-armoniac, a dram. Mix and exhibit forty or fifty drops a day, towards the height of the Diſeaſe, or when the Puſhes are well advanc'd, and the Symptoms mitigated. After a ſufficient Eruption, we ought to promote their ſuppuration, and prevent Pits in the Skin, by exhibiting a Compound Powder of Crabs-Eyes, Hartſhorn, Myrrh, and Salt of Carduus Benedictus.

Beſides the direct Indications of the Small-Pox and Meaſles, we ought likewiſe to obviate their incident Symptoms, as unquietneſs and inclination to Vomit, if it be proper to ſtop it, by the Spirits of Hartſhorn ſuccinated, and Extract of Treacle, mix'd with Laudanum Opiatum; a Looſeneſs towards the height, accompany'd with a murmuring noiſe in the Belly, and frothy Excrements, by ſeal'd Earth, or Laudanum Opiatum and Diaſcordium, mix'd with other ſpecifics; Watchings, Deliriums and Convulſions, attended with a hardneſs of the Belly, by exhibiting the Cinnabar of Antimony, or Spirit of Hartſhorn ſuccinated; or injecting Clyſters, anointing the Navel and pit of the Stomac with diſtill'd Ovl of Amber; and, in the beginning of the Diſeaſe, injecting Clyſters. A bleeding at Noſe ought to be promoted, if needs be, by ſqueezing or pricking the Noſtrils; or, if it exceed meaſure, reſtrain'd by applying dry'd Toads to the Arm-pits, or mixing Narcotics with Abſorbents, and avoiding all volatil Ingredients. A Cough, or any diſorder of the Breaſt, ought to be repreſs'd by Scabious Water mixed with Spirit of Sal-armoniac aniſated, and Laudanum Opiatum, adding, before the Eruption, incraſſating Syrups, ſuch as thoſe of Colts-foot, Jujubes, *&c.* and after the Eruption, attenuating ones, ſuch as thoſe of Tobacco, Mint, Hyſſop, *&c.* A weakneſs and proſtration of ſtrength ought to be repair'd by exhibiting the Tincture of Coral mixed with the Spirit of Stag's Heart, or a Toaſt ſoak'd in Rheniſh Wine.

Theſe Symptoms laſt mention'd precede the Eruption. Thoſe which follow the Eruption, are likewiſe to be accounted for. As if the Pox or Meaſles retire unſeaſonably, and fall upon the nervous Syſtem, cauſing Deliriums, and Convulſions, apply bliſtering Plaiſters to the Soles of the Feet, and exhibit the Aſhes of Scarlet Cloth in Wine. If the ſharpneſs of the Humor threaten Pits in the Face, exhibit

exhibit Crabs Eyes and Myrrh inwardly, and apply outwardly with a Feather, the Spirit of Wine tinctur'd with Myrrh, or Rose-water, in which Sugar of Lead is dissolv'd, or the Plaister of Frogs Spawn with Sugar of Lead: But all external applications before maturation are much suspected, for fear of repulsing the Matter. Lime-water in which Sulphur is boil'd, being mix'd with Rose-water, or a Cataplasm of the Meal of Beans and that of Lupines and Ox Urine, are of use for taking off the Scars. If a Salivation succeed to the Eruption, let the Patient drink plentifully of Barly Water, or small Beer, and likewise Gargle his Mouth with it.

If the Small Pox or Measles threaten injury to the Eyes, either by settling in the Apple of the Eye, or distending the Eye-lid, let the Eye be wash'd with the infusion of the Glass of Antimony in Plantan and Rose-water, with Tutty and Sugar of Lead. If the Eyes be red and itch, apply a piece of raw Beef to the Eye, renewing it every quarter of an hour for some time. Or let a healthy Woman chew Garlic, and breath upon the Eye; or wash the Eye with the juice of Chervil or Rue, mix'd with Fennel Water; or make a Collyrium of Plantan, Night-shade and Rose Water, in which Sumac and Plantan Seeds are boyl'd, or the Rinds of Pomgranats infus'd. The mucilage of Marsh-mallows extracted with Fennel Water; or the infusion of white Vitriol and Tutty in Eye-bright Water; or Plantan-Water mix'd with Frogs Spawn, and Sugar of Lead; are also very proper. Or,

Take of Plantan-Water an ounce; Eye-bright and Rose Water, of each half an ounce; prepar'd Emerald, twelve grains; prepar'd Pearl, six grains; Camphyr, three grains; Saffron, four grains. Mix and drop it into the Eye. Some choose to drop into the Eye, a drop or two of the Fat of Vipers.

If the Eye-lids are beset with the Pox, and inflam'd, notwithstanding all these Precautions; apply the Decoction of Line-seed, Fenugrec seed, and Mallows, or that of Melilot-flowers, and Quince-seeds. Some apply Milk; but I cannot approve their Practice, since 'tis apt to become Acid. If, after all, the Eyes be injur'd, and remain so after recovery of the Pox, 'tis proper to use *Rulandus*'s Opthalmic Water, and apply Blistering Plaisters to the Nape of the Neck, and when the Blister ceases to run, apply two behind the Ears, mixing one part of the Blistering Plaister

five or six parts of the Plaister of Frogs-spawn, to keep the blister open.

If the Pox injure the Nose or Ears, the former is reliev'd by applying Vinegar of Roses impregnated with Camphyr, and anointing the Crusts within the Nostrils (if there be any such) with fresh Butter wash'd in Rosewater. The latter, *viz.* The Ears are restor'd by putting into the Ears the Essence of Castor with Cotton, or fumigating it with the Decoction of Castor, Myrrh, Coloquintida, Fennel-seed, and a litele Saffron in Wine; and applying blistering Plaisters behind them.

The Throat is frequently infested by the Small Pox, and consequently respiration disturb'd. To prevent this inconvenience, let the Mouth and Throat be wash'd with Goats Milk and Plantan Water, or the Tincture of Poppy-flowers, or with the common Gargles mix'd with Horses dung, or the Juice of River Crabs and Nitre. After the Wheals are open, 'twill not be improper to add Allum and Honey of Roses. Plantan is also a noted Specific both against this Symptom, and that of pissing Blood.

If the Tongue be ulcerated, apply Honey of Roses sharpen'd with Spirit of Salt, or the following Liniment, *viz.* Take of the Flowers of Holyhocks, half an ounce; Pomgranat Flowers, two drams; choice Myrrh, a dram; Allum half a dram; with Honey make a Liniment, or Electuary.

If the Lips be much in trouble, anoint 'em with the mucilage of the Seeds of Quinces. Sometimes the Small Pox leave most obstinate Ulcers in the Head, Breasts and other parts, which elude all common methods, and yield only to Mercurial Salivations.

The Scarlet Fever is generally reckon'd a retainer to the Measles. It invade, for the most part, Children, and is occasioned by an Ebullition of the Lymph, and attended by the Symptoms of a Catarrh. It is in some measure acute, and after three or four days from its beginning, breaks out in the Neck, Shoulders and Breast, either in the form of an equal redness resembling a Rose, or that of dispers'd red Spots, which fall off about the seventh day like Scales. It is cur'd as the Measles or Small Pox, but has this peculiar property, that 'tis follow'd by soft swellings in the Face and Legs, that last for eight days after its diappeacance.

CHAP.

CHAP. VII.

Of the Plague and Pestilential Fevers.

THe Plague is an exalted pitch of Malignity, compatible with any Diase whatsoever. In this place we take it for an Epedemical, catching, and highly malignant Disease, proceeding from poisonous Miasma's in the Air, and attended by fiery Botches, Bubo's, Carbuncles, or malignant Spots. This Miasm is volatil and spirituous, and fit for encountering Mens Spirits, and defiling the vital Spirit of the Air. Perhaps it approaches near to the nature of Arsenic. The Passions of the Mind, Fear and Apprehension, subterranean damps let loose by Earth-quakes, Famine, Corruption of dead Bodies, and such like, are its remote causes. When this Poisonous Miasm afflicts Mankind, it joins to the Human Spirits, and dispersés it self where these meet with the readiest reception; upon which account, Relations are liable to the Contagion, tho' in distant Places; and the Beasts are secure, when Mankind falls an universal Sacrifice.

The Plague is not always accompany'd with a Fever. When Nature is weak, it yields to the oppression, and makes no Feverish resistance. The Symptoms are the same as those of Malignant Fevers, rais'd to the highest pitch; to which we may add swellings in the Arm-pits, Groin, behind the Ears, or in any glandulous place, with a pricking shooting Pain in the middle; Botches and Carbuncles in the Fingers, Nostrils, Eyes and Lips; sometimes fatal black-spots, or malignant Ulcers all over the Body; a sudden prostration of strength, violent pains of the Head, without any cause, or following the passion of fear, *&c.* the degeneracy of the Pulse from being large and swift, to a small, languid, intermitting, unequal state; and a burning heat within, but moderate on the external surface of the Body. An imminent Plague is foretold from unwonted swarms of Insects resorting to a Country.

The Prognostics of a Plague are very fallacious: 'Tis an acute Disease, ending sometimes in twenty four hours, sometimes in two, three, or seven days; in general, those who are Scabby or Pocky are in least danger, as being defended by their peccant Acid. Preceding Fatigue or Fear

are

are bad Omens. Black livid ſpots are a worſe Symptom than Carbuncles, and theſe worſe than Bubo's. Scars or marks of Mortification are always fatal. Many and large Bubo's are a good ſign, as alſo copious Sweats. But cold Sweats, or many Carbuncles; coldneſs of the extream parts, eſpecially the Noſe; a livid Circumference ſurrounding the ſwellings; Carbuncles growing upon Bubo's in Places full of Tendons; the imperfect Eruption, or retreat of the Tumors; a Hiccough ſucceeding to the Eruption; the white, blue or livid colour of Carbuncles, while the Fever is not abated; Pains of the Throat, and difficulty of ſwallowing, attending Bubo's in the Neck, or behind the Ears; theſe (I ſay) are fatal Symptoms. If Bliſtering Plaiſters raiſe no Bliſters, 'tis an infallible ſign of death in all Diſeaſes. If a Cautery applied raiſe a white Cruſt after the application, or if the place be dry, or not cover'd with Puſhes, and the Botch continue to ſpread further, or if Iſſues dry up of a ſudden, 'tis a deſperate caſe. Carbuncles in the Stomac, Guts, Bladder, Eyes and Noſtrils, are plain Indications of death. Anxiety of the Breaſt without a Fever, frequent ſneezing, a Looſeneſs, Hiccough, Vomiting, Convulſions, Hoarſeneſs, a flux of Blood by Urine or Salivation; and in ſhort, all the diſmal Circumſtances of malignant Fevers (related above) are the Companions of fatal Plagues. A continual Coſtiveneſs, and numerous Puſhes, filled with laudable Matter, appearing after the Application of a Cautery to any part, are look'd upon as hopeful ſigns.

The Cure divides it ſelf into two Branches. The firſt is that of preſerving from imminent danger; the ſecond reſcues from actual Oppreſſion. Preſervatives regard either the Air, the common Vehicle of Contagion, or the Bodies of People. As for the former, the Air is purifi'd by the ſhooting of Cannon, by burning Gun-powder or Nitre, and Sulphur with Amber, Myrrh, Camphyr, Pitch, Benzoin, and Juniper-berries; by throwing the Mineral Acid Spirits, or Vinegar in which Vitriol and Verdigreaſe are infus'd, together with Camphyr upon hot Bricks; by burning of Goats Horns, and filling the Air with ungrateful Smells, ſuch as that of a Houſe of Office, of Hogs Dung, *&c.*

The other ſort of Preſervatives, arm the Body and Spirits againſt the aſſaults of the contagious Miaſmata. For this end we ought to avoid faſting or going abroad before eating. Butter and Rue Leaves, and a draught of good generous

Wine

Wine, upon which Camphyr has been kindled, are fit to be taken in a morning, as also the Mineral Acid Spirits, and the Acid Juices of Fruits; but above all, Vinegar impregnated with the Vertue of Camphyr, Myrrh, Juniper-berries, Zedoary, and other Aromatic Simples. Next to Vinegar are the sulphureous balmy Ingredients, especially Sulphur, Myrrh and Amber, which cover the Spirits from the attacks of the morbific Matter, and ought to be taken in Acid Vehicles. To these we may add Opium and Diascordium. Venice Treacle, and such like hot Compositions ought to be cautiously us'd, and always dissolv'd in Vinegar. Sugar of Lead also given with Camphyr from four to ten grains, is of excellent use, but 'tis very volatil, and, if indiscreetly us'd, may accelerate the Disease.

Externally, there is nothing equals the cutting of Issues. A Spunge wet with Aromatic Vinegar impregnated with Myrrh and Camphyr, may frequently be applied to the Nostrils. Let Ginger and Zedoary, or Troches made of Myrrh and Camphyr, and Tragacanth dissolv'd in Vinegar, be often chew'd and held in the Mouth. Let the Temples, Wrists and Breasts be anointed with the Apoplectic Balsam, mixed with Camphyr; let *Sala*'s magnes Arsenicalis, mixed with Benzoin dissolv'd in Spirit of Wine, be form'd into Tablets, and hung in a scarlet Cloth bag upon the Breast. If the Contagion proceed from subterranean Damps, let dry'd Toads be hung over the Breast; If it proceed from the Air, let Spiders stand in their room. Some recommend crude Mercury calcin'd by the fumes of Lead for the same purpose.

The direct Cure of the Plague consists in expelling the poisonous Miasma's by Alexipharmacal Medicines. For the regular performance of which, the following Cautions will be of use.

1. Let Sudorifics be repeated every eight hours even after the Eruption of Bubo's or Carbuncles; and after sweating, exhibit a Cordial draught mix'd with Acid Spirits, for thickning the Blood, and rallying the dispers'd Spirits.

2. Avoid sleep in the time of sweating, and for that end, apply Vinegar mix'd with Camphyr, or Castor, to the Nostrils.

3. If the Sudorific cannot procure sweat, let a hot Loaf of Bread be excavated and fill'd with Venice Treacle and Spirit of Wine Camphoris'd, and applied to the Stomac, or Navel, the under Crust being taken off.

4. If

4. If obſtinate Watchings threaten Delirums, and prevent Sweat, let Laudanum Opiatum be added to Sudorifics, in order to procure ſleep after ſweating.

5. If the fermentation be faint and low, Venice Treacle and Mithridate are proper. But if the Fever be high, and attended by a violent heat, they are fitly exchang'd with Antimonial Powders, and lixivious Salts.

6. Acids mix'd with Sudorifics are always proper.

7. Bliſtering Plaiſters are applied with extraordinary ſucceſs to the Neck, Legs and Arms. They ought to be very ſharp, and after they're remov'd, the Bliſters kept open with the Plaiſter of Melilot, covered with the Powder of Cantharides. But if the Bladder be inflam'd, or the Urine hot; if the Patient be very weak, or with Child, or look for her Terms, they are improper.

8. Blood-letting is always pernicious.

9. In the beginning of the Diſeaſe Vomits are very uſeful. They ought to be mix'd with Sudorifics. Purgatives and Clyſters are not ſafe.

10. If the Patient be moleſted with a vomiting, ſo that Sudorifics cannot be retain'd in the Stomac, let Sweat be forc'd, by applying a hot Loaf as above, and covering up the Body and Face.

The Specifics that are us'd in this Diſeaſe, are Camphyr given in ſubſtance, or its Oyl mixed with Oyl of Amber, and that of Citron Peel, called *Heinſius*'s Oyl; Ivy-berries, given to a dram in Vinegar and Wine; Juniper and Elder berries, and the Rob of either given in Vinegar; Garlic heads bruis'd and exhibited in Vinegar; the Blood of a Stork, or its volatil Salt; the Spirit of Hartſhorn ſharpned with its own volatil Salt, and given to a dram; the volatil Salt of Vipers (above all) ſprinkled with Oyl of Amber, and mix'd with Camphyr; Mans Ordure applied externally to Bubo's, and given internally with the Patients own Urine; Sulphur or its Flowers given to a dram in an Acid Vehicle; or rather the fix'd Sulphurs of Antimony, which in this caſe ſurpaſſes all other Medicines; the Oyl and volatil Salt of Amber; and Diaſcordium given to two drams in Aromatic Vinegar.

Take of the flowers of Sulphur, half a dram; Cinnaber of Antimony, fifteen grains; Camphyr, ſix grains. Make a Powder. The volatil Salt of Vipers, or that of Hartſhorn, or prepar'd Amber may be added by turns.

Take

Take of the Rob of Juniper, three ounces; Diascordium and Mithridate, of each an ounce and a half; Venice Treacle, half an ounce; Flowers of Sulphur, two or three ounces; Myrrh, three drams; Frankincense, six drams; Camphyr, two drams; Saffron, half a dram; Juice of Citrons, half an ounce. Make an Electuary. Dose a dram and a half in a convenient Vehicle.

Take of the Water of Carduus Benedictus, an ounce and a half; Vinegar of Wine, six drams; Diascordium, a dram and a half; Camphyr, six grains; Syrup of the Juice of Citrons, half an ounce. Make a Potion for one or two Doses.

Take of hot Verdigrease a pound, sprinkle it with three ounces of distilled Vinegar; distill through a Retort in Sand, with an intense heat; then add to the Spirit thus distill'd, a double quantity of rectified Spirit of Tartar; and half a dram of Camphyr, and a little Opium for every ounce of the compound Spirit; and let all stand for digestion. This is call'd Elixir Antiloimicum, and is of excellent use.

Besides the universal Cure of the Plague, it is requisite also to have a peculiar regard to its incident Symptoms.

As for Bubo's, or swellings of Glandules, they require the application of attracting, ripening and cleansing Ingredients. If they be black and livid, and threaten a Gangrene, they ought to be cut up with a Launcet, without waiting for maturation; otherwise 'twere proper to endeavour their maturation, and attract the Poison, by applying roasted Onyons, mix'd with Mustard-seeds; Or, in case of great Pain, the Juice of Onyons mix'd with Venice Treacle and Soot. Mans Ordure, or a Melilot Plaister, mix'd with the Powder of dry'd Toads, and that of Amber, from which Spirit of Wine has been thrice evaporated, are much approv'd for the same use. But of all Plaisters, *Sala*'s Magneticum Arsenicale, is the best. 'Tis prepar'd thus,

Take of crude Antimony, yellow Sulphur and white Arsenic, of each two ounces. Set them in hot Sand in a Phiol 'till they melt and become a dusky Mass. Then take of this Mass, Gum Sagapanum, Gum Ammoniac and Galbanum, of each three drams; Turpentine, and Wax of each half an ounce; distill'd Oyl of Amber, two drams; dulcify'd Spirit of Viariol, a dram. Dissolve the Gums in Vinegar, then strain 'em through a Linnen cloath, and thicken 'em again. Melt the Turpentine and Wax apart, then add the Gums, and make a Plaister according to Art.

This

This Plaiſter will raiſe a malignant Cruſt, which ought to be taken off by applying the Ointment of Baſilicon, mix'd with Venice Treacle. If the Skin be thick, and the ſwelling lie ſo low that the Plaiſter cannot reach it, let a ſharp bliſtering Plaiſter be firſt applied; or, if that be ineffectual, a Cautery of quick Lime, and Spaniſh Soap, that ſo the Plaiſter may operate more freely. If it cauſe an Inflammation, let ſoft'ning Cataplaſms be applied above the Plaiſter, 'till the Cruſt come off. After the ſwelling is open'd, it ought to be cleans'd by the Infuſion of Birth-wort, Myrrh, Aloe, and Saffron in Spirit of Wine Tartaris'd; or, Balſam of *Peru*, and Balſam of Sulphur mix'd with Treacle; and applying Emplaſtrum Album, mix'd with Oyl of Tobacco. After 'tis ſufficiently cleans'd, apply *Rulandus*'s Plaiſter Diaſulphuris for conſolidation. In all Compoſitions relating to peſtilent glandulous ſwellings, Mercury, Vinegar, Opium and Lead ought to be avoided.

Carbuncles are the beginning of a Mortification, which diſplays it ſelf with a purple colour, ſurrounded with a red or livid Circumference, incroaching gradually upon the adjacent parts, till the mortified part fall off. In order to prevent their ſpreading, let a circle be drawn round 'em with an Emerald ſtone, 'till the part become livid; then touch the point or top with Butter of Antimony; and when the Cruſt appears, apply *Sala*'s Plaiſter, call'd Magneticum Arſenicale. Some chuſe to open it firſt with an actual Cautery, and then apply either this Plaiſter, or attracting and emollient Cataplaſms of Garlic, Water Germander, Marſhmallows, Meal of Lentils, Berries of the Herb Paris, Pigeon's dung, Black Soap and Hony; or, in caſe of great Pain, the Plaiſter of Hounds Tongue: But, after all, be ſure to avoid fat things. After the Matter is evacuated, apply a Cataplaſm of Comfrey Roots boil'd, or the Ointment of Baſilicon, with Balſam of Sulphur and Treacle.

The Symptom of heat is but ſeldom violent in Malignant Fevers, or at leaſt ought not to be much reſtrain'd, for fear of repreſſing the cuticular Eruptions. If neceſſity require that it ſhould be moderated, Antimonial Nitre, and all nitrous Medicines taken inwardly, and applied outwardly with Juice of Houſe-leek and Roſe-water to the Wriſts, Forehead and Temples, will anſwer the Deſign.

Head-

Head-aches, Watchings and Deliriums are frequently the Companions of peſtilential Fevers. If they happen in the beginning they require a Cure; but if their firſt appearance be put off 'till towards the time of the Criſis, 'tis not ſafe to oppoſe 'em. If the hinder part of the head be particularly affected, it ſignifies a peculiar diſorder of the Head and Animal Spirits, independent of the Fever. If the Head-ach ſeize chiefly the Fore-part, or be attended by Anxiety of the Breaſt, and Unquietneſs, it proceeds from the Stomac, and ought to be prevented by Vomits, and ſometimes Clyſters in the beginning of the Diſeaſe. However, for mitigating theſe Symptoms, let Cataplaſms of Rue leaves, Raddiſh-roots, Salt, Pigeons dung, and Elder Vinegar, be applied to the ſoles of the Feet, and palms of the Hands; or the Temples and Fore-head fomented with the diſſolution of Nitre in ſome convenient Water, or anointed with the Ointment of Alabaſter, and expreſs'd Oyl of Poppies, but ſo as to have a care of ſtopping the Pores, and hindering Tranſpiration. Inwardly, exhibit the emulſions of the Cold Seeds, Poppy Seeds, *&c.* And add Opium to the other Specifics, after the firſt two or three days are elaps'd.

If a drowſineſs and inclination to ſleep attend the Plague, let Opium, Treacle, and all Compoſitions partaking of it, be avoided; let Tincture of Caſtor and Vinegar be frequently taken inwardly, and applied to the Noſe; or Frankincence, Bayberries and Pepper, beaten up with the yelk of an Egg, be applied to the Fore-head.

A Symptomatical bleeding at Noſe, is cur'd by applying a Toad under the Arm-pits, waſhing the Hands and Feet with Vinegar; applying to the Fore-head, Neck and Temples, Cataplaſms of Chalk and Potters Clay, beat up with Vinegar; and giving inwardly large quantities of Nitre, Spirit of Vitriol, Spirit of Salt, and Opiats mix'd with Aſtringent Juleps. After the bleeding is ſtopp'd, a gentle laxative may be exhibited, if other Circumſtances allow of it. Thirſt is alſo abated by Nitre, eſpecially Nitrum Antimoniatum, or clarify'd Whey, with Juice of Citrons mix'd with the Spirit of Salt, and Gelly of Hartſhorn. A gnawing at Heart, and vomiting is cur'd by the following Electuary.

Take of the Conſerve of Mint vitriolated, Conſerve of the Pulp of Citrons, of each an ounce and a half; preſerv'd Citron Peel and Diaſcordium, of each ſix drams; Confection Alkermes, two drams; Salt of Wormwood, a dram;

dram; with the Juice of Quinces. Make an Electuary. In the mean while, foment the Stomac with a mixture of the Spirit of Wine, Apoplectic-water, Venice Treacle, and Camphyr; or anoint it with expres'd Oyl of Nutmegs, and the diſtilled Oyls of Wormwood and Mace, and apply afterwards the Plaiſter of Caranna, or that of Tacamahac, mixed with Venice Treacle, and Balſam of *Peru*.

A Looſeneſs or Gripings of the Gutts attending a Plague, are accounted for, by exhibiting Diaſcordium, Opium, abſorbent Powder, Extract of Treacle, or that of Tormentil, Camphyr, Vinegar, and dulcified Spirit of Salt. A ſuppreſſion of Urine happening about the Criſis, is a token of Critical Sweats. If it aſſault the Patient at any other time, let the Pubes be anointed with Oyl of Scorpions, and Ointment of Marſhmallows, and all bliſtering Plaiſters be omitted. Swooning, palpitation of the Heart, and anxiety proceeding from the Stomac, are alleviated by abſorbent Powders. If they proceed from clotted Blood, or the convulſive motion of the Spirit, let the Confection Alkermes, Caſtor, Spirit of Hartſhorn, and that of Sal-armoniac, be exhibited; externally ſprinkle the Face and Temples with Cephalic mixtures, joyned to Caſtor and Vinegar of Roſes.

A Prunella or Quinſey is mitigated by applying outwardly to the Neck, a bag quilted with Elder-flowers and Saffron, ſprinkled with Spirit of Sal-armoniac; or gargling the Mouth with the Decoction of Germander, Self-heal, and red Roſes in Barly-water, mixed with Nitre and Sal-armoniac.

As for the Spots reſembling Flea-bitings, which frequently appear in the Back, Arms and Legs, the above mentioned Sudorifics, eſpecially Myrrh, Caſtor, Camphyr, and the volatil Salts are moſt proper. All manner of Cold muſt be carefully avoided, and the body rub'd all over every day with a bag of hot Salt, or Salt Peter, and Cupping-glaſſes frequently apply'd to the Back, Arms and Legs, and frequently taken off.

SECT

SECT. XVI.

Of disorders relating to the motion of the Blood, from the Heart to to the extreme Parts.

HAving thus dispatch'd the disorders relating to the Fermentation or intestine motion of the Blood, we come now in order to consider those of its circular progress. The Blood receiving new Life in the Lungs, throws it self with fresh vigour into the left Ventricle of the Heart, inlarges its Capacity, and distends its Fibres. This distention or irritation of the Fibres of the Heart, occasions an unwonted crowd of Spirits, which repair thither from the Brain, contract the whole Heart, straiten its Cavity, and impetuously squeeze out the Blood into the great Artery. In like manner, the distention of the Artery, caus'd by the eruption of the Blood solicites the Spirits to sally out, and contract their offended Fibres, and drive the Blood forwards, 'till it arrives at the Veins; thro' which it meers an easie Course to the Heart, moving, without offence or irritation, from narrow Passages into broader Channels; so that the Veins, whose Tunicles are soft, and not over-touchy, are in no danger of being provok'd to Contractions, by a languid impoverish'd Mass,

This successive contraction and dilatation of the Heart and Arteries, call'd by the Ancients Systole and Diastole; the former occasion'd by the Spirits repairing to them, and the latter by the violent irruption of Blood; are what we call the Pulse. This we generally inquire after, where the Arteries are most accessible, *viz.* About the Wrists, Temples and Ancles, in order to discover the state of the Blood. And if we find the Artery much dilated by turgid Blood, we call it a large Pulse; if the

if the Blood move forcibly and impetuously, we term it ſtrong; if the Arteries yield to the touch, and do not ſeem to reſiſt or rebound, we ſtile it a ſoft Pulſe; If the Blood move ſwiftly, the Pulſe is frequent; and if the Heart and Arteries be ſuddenly, and much irritated, 'tis quick: Now ſmall, weak, hard, unfrequent and ſlow Pulſes, are the direct reverſe of theſe.

Circulation is of uſe to renew the ſtrength of the Blood in the Lungs, and ſupply all the parts of the Body with Nouriſhment. For 'tis the united Maſs of Blood and Chyle that furniſhes the ſpermatic parts with Chyle or milky imperfect Blood, and thoſe that are ſanguine with finiſh'd Blood, according to the natural demand of the reſpective parts.

CHAP. I.

Of the Palpitation and trembling of the Heart.

WHEN the blood circulates thro' the Heart, it occaſions a regular Syſtole and Diaſtole. But a palpitation of the Heart is a diſorderly, convulſive, unequal, vehement Contraction, and ſometimes ſcarce perceivable in the Arteries, tho', at other times, exalted to that pitch, that it makes an audible noiſe. A trembling of the Heart is a weak imperfect Contraction.

Both are equally owing to the irritation of the Heart, but with this difference, that a palpitation is attended by a violent and reſiſting ſtrength, and a trembling by a yielding weakneſs. This irritation is ſometimes the effect of the ſharpneſs, or over-bearing quantity of Serum, or of Worms in the Heart-purſe; or of little Wheals or Excreſcences within and about the Heart and great Arteries; ſometimes it proceeds from little clotts of blood left by the vicious Maſs in the Heart,

Heart, or from a provoking Acid prevailing in the Mass of blood as it passes along, or from its irregular and unequal turgescence. Upon which account the suppression of the Terms, the Scurvy and Hypocondriac sickness are frequently follow'd by palpitations of the Heart. Sometimes it takes its rise from the slow and stagnating condition of the Blood, and by consequence, from whatever crosses or thwarts the circular progress. But of all its Causes, the most frequent, is the occasional disorder of the Nerves and Animal Spirits, proceeding either from Fear, Anger, strong Smells, *&c.* Or from Hysteric and Hypocondriac Passions, and the indisposition of the Spleen: For the Nerves of the Heart, and those of the lower Belly, especially of the Spleen, entertain a mutual Commerce; by vertue of which the contraction of these Nerves is continued to the Heart, and in its progress, resembles the assent of Fumes or Steams from the Spleen and Intestines. The facility of this Communication is much enhanc'd by the Scorbutic or Acid Constitution of the Blood, which is equally dispos'd to provoke both the Nerves of the Heart, and those of the Bowels.

As for Diagnostics. A Palpitation of the Heart is discover'd by laying one's Hand upon the Breast. If it proceed from a Dropsie of the Pericardium, or Obstructions in and about the Heart; the Pulse is small and slow, respiration difficult, and the Body inclining to a Consumption, and Hectic Fever. If it proceed from Worms in the Heart-Purse, it returns without manifest cause, the Breast is molested with gnawing, pricking, corroding Pains; the Patient is frequently troubled with a pale Countenance, intermitting Pulse, and a prodigious unquietness, and sometimes sudden Swoonings or Epileptic Fits. If it take its rise from the Hypocondriac Disease, it is frequently interrupted; and when it comes, is usher'd in by a murmuring noise in the Belly, or attended by disorderly Symptoms in the Abdomen, and a sense of constriction of the Heart, as if it were squeezed betwixt two Hands. If it flow from a Scorbutic Original, it does not invade when the Person lies quietly in Bed, but upon the least motion of Hand or Foot, displays it self, and is frequently accompany'd by Swoonings. A trembling of the Heart is attended by a prostration of strength, and an unequal, weak, languishing Pulse.

The remiſſion or intermiſſion of the Pulſe, following a palpitation of the Heart, prognoſticates Swoonings. If a palpitation proceed from a Scorbutic cauſe, or accompany malignant Symptoms, 'tis very dangerous. If it be occaſioned by Worms in the Pericardium, or Excreſcences in the Heart or adjacent parts, 'tis incurable. If it happen in ones Youth, it prevents Old Age.

The Indications for Cure, are to remove the irritating cauſe. Opium impairs only the ſenſe of irritation, but has no influence upon the cauſe it ſelf; wherefore it ought to be very cautiouſly us'd, eſpecially, conſidering that a palpitation or trembling is frequently attended by a notable weakneſs. In Hypocondriac or Sorbutic caſes, perhaps it may not be improper. Blood-letting is alſo dangerous; yet if the ſtagnation of the Blood give riſe to the Diſeaſe, or if the Patient be young, and the blood boyl high, 'tis in ſome meaſure allowable; as when a palpitation is caus'd by fear, ſuppreſſing of wonted evacuations, or a violent commotion of the Body.

Of all palpitations of the Heart, thoſe of a convulſive Character, that ſpring from Scorbutic or Hypocondriac cauſes, or, in a word from a prevailing Acid, are the moſt frequent, and require a more particular regard. Earthy Ingredients, Steel, and volatil Salts, are Medicines moſt in uſe, againſt theſe and all other ſorts of palpitations. The Tincture of Coral, prepar'd with a Menſtruum of May Dew or Snow, and mixed with ſome cordial Liquor, is an univerſal Specific. Now, of the cordial Ingredients, Baum is the moſt beneficial. Its Spirit, or primum Ens, or the Eſſence of Ambergriſe extracted with it, is an admirable ſupport for decaying Nature. The Leaves of Baum, and thoſe of Borrage, ſprinkled with Roſe-water and Vinegar, are applied outwardly to the Heart, with good ſucceſs. Next to Baum are Cloves, Citrons, Orange peel, Roſemary, Zedoary, Elecampane, Dill, and their various productions. The Eſſence of Saffron given inwardly, and a Bag of Saffron and Camphyr hung over the pit of the Breaſt, are of good uſe. The Eſſence of Ambergriſe and Moſch, are celebrated Medicines; but Ambergriſe injoys a ſtupifying quality, which may be extinguiſh'd by putting it into fermentation, as in the preparation of Spiritus Roſarum Ambratus. Beſides, there are ſome ſtudious Men, and hyſteric Women that are eaſily offended by this, and all other oily volatil Salts; in the room of which, we may ſubſtitute the meagre thin Salts, ſuch as

the

the Spirit of Sal armoniac, and dulcify'd Spirit of Nitre. The Essence of Juniper-berries prepar'd with their own Spirit; the carminative Spirit *de tribus*; the volatil Salt of Vipers; the Spirit and volatil Salt of Hartshorn; the Spirit, volatil Salt, and distill'd Oyl of Amber; the Essence of Castor mix'd with Camphyr, the Oyl of Cinnamon, the Syrup of the filings of Steel, Whey, and all Anti hypocondriac Ingredients are much approv'd. Externally in a Hysteric or Splenetic palpitation, we apply the same things as are proper against the Causes.

Take of prepar'd red Coral, native Cinnabar, and chalybeat diaphoretic Antimony, half a scruple; volatil Salt of Hartshorn, three grains; distill'd Oyl of Cloves, a drop. Make a Powder.

Take of the Tincture of Coral prepar'd with the Spirit of Stags-heart, two drams; the Spirit of Roses impregnated with Ambergrise, a dram. Dose thirty or forty drops in Cinnamon-water.

Take of Cinnamon-water impregnated with Quinces, an ounce; the Cordial-water of Saxony an ounce; Essence of Juniper-berries, two drams; Essence of Saffron, half an ounce; Spirit of Venice Treacle camphoris'd, a dram; distill'd Oyl of Cinnamon (for Men) or of Amber (for Women) four drops, shake and mix them. Dose a spoonful or two.

Oft-times not only the Heart, but the Arteries, especially that leading to the Spleen, and that of the Temples, are seiz'd with a palpitation. The cause is an inflammation of the Place, or stagnation of the Blood, or Convulsions of the Spleen and adjacent parts, affecting the Tunicles of the Artery. The first two are remov'd by Sudorifics, and the last by Steel and Anti-hypocondriac Medicines.

CHAP. II.

Of Swoonings.

THere are three kinds, or rather degrees of Swooning; *viz.* Lipothymia, Syncope, and Aſphyxia. In a Lipothymia, beſide that the Pulſe is weaker and leſs, the Senſes both internal and external are eclips'd, and animal motion, both voluntary and natural, does in a manner fail; all which Symptoms go eaſily off again, and the Patient is reſtor'd to health. In a Syncope the Symptoms are more Tragical, the Pulſe, Senſe and bodily Motion are quite extinguiſh'd, Reſpiration is ſcarce perceivable, the Heart is much oppreſs'd, a cold clammy Sweat and Paleneſs covers the Body; and ſometimes the Excrements come away of their own accord. In an Aſphyxia all things are yet worſe; ſo that the Patient lies as one dead, without any Pulſe, or ſign of Life. Now in order to diſcover the cauſe of this diminution of the Pulſe and want of ſtrength, we muſt call to mind, that the vital force of our Body is founded radically in the Blood, but exerts it ſelf by the moſt ſubtile, active and moveable part, call'd the Spirits; which being volatiliz'd by the inſpired Air in the Breaſt, like Rays of Light, are diffus'd through the whole Body, either in a vital Capacity, together with the Blood in the Arteries, or ſeparately by the Brain and Nerves, under the Character of animal Spirits.

When therefore the Blood by reaſon of its leſs quantity, or viſcidity and acidity, or want of active Salts, is unfit to undergo the vital Fermentation in the Breaſt, the Spirits muſt of neceſſity fail; whence enſues a weakneſs and languiſhing, that ſteals on by degrees. This vicious Conſtitution of the Blood is oftentimes occaſion'd by ſome error in Diet after acute Diſeaſes, or follows the indiſcreet management of chronical Diſtempers, ſuppoſing the Blood to be rob'd of its Spirits, and the Chyle to be over power'd with Crudities, ariſing from the weakneſs of the ſtomachical Ferment and flatneſs of the Bile.

But if on a ſudden the vital fermentation of the blood in the breaſt is interrupted, and by conſequence the luminous Ray of the vital and animal Spirits fail; or if incident external Objects pour diſorder and confuſion on the animal Spirits; then follows a ſudden proſtration of ſtrength, and ceſſation of Senſe and Motion, which according to its various degrees, is called either Lipothymia, Syncope or Aſphyxia. Now the vital fermentation of the blood is interrupted, either by immoderate evacuations of any Humor or Juice, ſuch as the blood, ſeminal Liquor, hydropic Water, corrupt Matter, *&c.* or by its coagulation, occaſion'd by Poiſon, or the unfriendly Miaſms of corrupt Matter iſſuing from an Impoſthume in the Heart.

The external Objects that diſorder the Spirits, are ſuch as excite violent and ſudden paſſions of the Mind, as Frights, Grief, Joy, Anger; alſo ſtrong and diſagreable Smells, the ſight of Animals to which we have a natural Antipathy, and whatever affects the upper Orifice of the Stomac, which by conſent influences all the other Nerves of the Body. Upon theſe occaſions, the Spirits are hindred in their wonted motions, either by oppreſſion or fixation, as in ſudden Frights; or diſſipation, as in exceſſive ſudden Joy; or deviation, as in Cramps and Convulſions of the Heart.

A weakneſs and languiſhing without any manifeſt cauſe, prognoſticates the ſudden invaſion of Diſeaſes, eſpecially thoſe of a Scorbutic Character. If it ſucceed to acute Diſeaſes, it threatens either a Relapſe, Dropſie, or intermitting Fever. In the beginning of any Diſeaſe, 'tis a ſign of Malignity.

Syncope's and Lipothymy's are more or leſs dangerous, according to the meaſure of their duration and the Character of their Symptoms; and if after the uſe of ſuitable means the Patient is not awak'd, they prove dangerous: Thoſe occaſion'd by an effuſion of Blood, or other Humors, are ſafer than others that ſpring from an internal acute Cauſe. If they are attended by anguiſh of Heart and reſtleſneſs, they proceed from the Stomac, and are leſs fatal when the left ſide of the Orifice is affected. Infine, the more clammy and copious the cold Sweat is, ſo much the more dangerous is the Syncope.

The Cure is compaſs'd by the continu'd uſe of volatil Aromatic Medicines, which promote the vital Fermentation, exalt the Blood, ſharpen the unactive Bile, remove the clammineſs of the Blood; and withal, reſtore the digeſtive force of the Stomac. Such are the Spirit of Wine, or gene-

rous Wines, impregnated with vegetable Aromatics; as,

Take of Roſemary, curl'd Mint, of each a handful; Sage and Baum, of each half a handful; Roots of the genuine Acorus, Elecampane and Fennel, an ounce; the four leſſer hot Seeds, of each a dram; Cinnamon, Cubebs, Cloves, Mace, of each two drams; cut, bruiſe, and tye them in a bag, to be infus'd in Wine; of which take a draught in the Morning faſting, and at Meals. In Scorbutical and Hypocondriac caſes, Scurvy graſs, Creſſes, Pepper-wort, *&c.* may be added, together with ſome drops of the Spirit of Sal-armoniac anilated, dropt into each draught.

We may alſo uſe ſtomachical Eſſences and Elixirs, Aqua Vitæ, Apoplectic and Epileptic Waters, *&c.* Volatil oily Salts, and a hundred ſuch like, to be taken thrice a day, morning, noon, and at bed time; and alſo before eating.

Now as to ſudden fainting and ſwooning, we muſt endeavour, when the Fit is preſent, to remove it; and when 'tis over, to prevent its relapſe.

There are three ſorts of Medicines in uſe during the Fit, *viz.*

1. Spirituous, ſulphurous and oily ones; ſuch are all inflamable Aromatic Spirits prepar'd by fermentation, diſtilled Aromatic Oyls, and compound Apoplectic Waters.

2. Spirituous Alcalis, ſharp volatil urinous Spirits and Salts, which are always the better for being well charg'd with Oyl.

3. Sharp volatil Acids, eſpecially Vinegar, which wakens the Senſes, and rallies the diſſipated Spirits. Sometimes we join 'em to Opiates, for ſtaying the convulſive motions of the Spirits.

Thus the principal Remedies uſed in a Syncope, are generous Wine; Cinnamon, its Water and diſtill'd Oyl, and all its preparations; all Apoplectic Waters; Spirit of Lilly of the Valley prepar'd by fermentation; Spirit of Venice Treacle both ſimple and compound; diſtill'd Oyl of Cloves, Cordial and Apoplectic Balſams; all volatil Salts; Spirit of Staggs Heart, Spirit of Hartſhorn prepar'd with Amber; Spirit of Roſes prepar'd with Amber; to which, if the Salt of Vipers, or that of Amber is added, 'tis almoſt an infallible Remedy.

Moroever, the Elixir of Citrons, or their Spirit ſharpen'd with the volatil ſalt of Hartſhorn, the Quinteſſences of Baum and Angelica; the Eſſence of Saffron mixed with a grain or two of volatil Salt of Hartſhorn; the Tincture of Coral

prepar'd

prepar'd with Spirit of Staggs Heart; the Tincture of Gold, the volatil Salts impregnated with distill'd Aromatic Oyls, such as rectified spirit of Sal armoniac, joined with Aromatic spirit of Wine, are all of excellent use, if exhibited in convenient Vehicles, such as Baum-water prepar'd with Wine, Penny-royal and Cinnamon-water; Aqua Vitæ, or *Matthiolus*'s Elixir Vitæ, Water of Staggs heart, *Mynsicht*'s hot cordial Water: and for Women, Swallow-water with Castor, *&c.* to which may be added, Camphyr, or spirit of Treacle camphoris'd.

As for Acids, we use spirituous and generous Wine, the Juice of Citrons, Juice or Syrup of Rasberries, Conserve of the Pulp of Citrons mixed with Diascordium, Vinegar impregnated with Castor, Vinegar of Marigold-flowers, or the Flowers of the Lilly of the Valley, or those of Elder, of Rue, *&c.* As for Narcotics, *Helmont*'s Laudanum Opiatum, (in a small Dose) Venice Treacle, Mithridate, Extract of Treacle, and such like Compositions are proper.

In the use of these Remedies, we must have a principal regard to the antecedent Causes: For example if the Syncope is caus'd by poyson, proper Antidotes must be added, and a Vomit exhibited, especially when the Poyson lurks in the first passages: When the Cause is lodg'd in the Stomac, or Abdomen. Vomits are also proper. Hysteric causes require Zedoary, Castor, volatil Salts, and other Hysteric Remedies.

Externally the same Remedies are applied to the Nostrils, Temples, Pulse, Lips and Pit of the Stomac: The Water of Lilly of the Valley, the Apoplectic Balsam, Oyl of Cinnamon, Oyl of Citrons, Oyl of Amber and Oyl of Cloves are the common Specifics for that use; some say that Fumigation with Amber alone, is of notable efficacy.

If the Syncope and Lipothimia proceed from unreasonable evacuations, excessive Sweating, Heat, Labour, Fatigue, Anger, Joy, or ungrateful Smells; let Acids be exhibited, as also a Vomit, if there be occasion. The Swoonings of malignant Fevers are accounted for, by exhibiting Camphyr in a small quantity, mixed with Laudanum Opiatum, and other Antidotes. When they are occasioned by frights, excessive bleeding, or immoderate sadness, spirituous oyly Remedies take place; and if the Paroxysm is dangerous, a Vein may be open'd: If we fear a Syncope from an excessive flux of the terms, Opiates joyn'd with Acids and prepar'd Coral, are of excellent use. For Old

Per-

Perſons, there's nothing equals the following Powder, *viz.*

Take of Ambergriſe, or Musk, eight grains, which diſſolve in twelve drops of Oyl of Cinnamon, and half a ſcruple of Oyl of Cardamums; add prepar'd Pearl, half a Scruple; whiteſt Sugar-candy, two ounces. Make a Powder.

SECT: XVII.

Of Nutrition.

THE eternal motion of our active principles, diſturbs the repoſe of the ſolid parts, unties their bonds, and expoſes 'em to decay. In order to repair this their loſs, the blood laden with Chyle, being finiſhed in the left Ventricle of the Heart, ſets out from thence, and makes a Tour round the Body; it viſits every part, and meaſures out ſuitable Recruits, which are ſtrain'd thro' the Pores of the Part, and nouriſh it by way of appoſition; or elſe ferment with the Guardian Spirits that defend the Place, and being thereby coagulated, and transform'd into a likeneſs with the part, conſolidate and give occaſion to its growth.

Thus all the Members of the Body are either augmented in our youth, or nouriſh'd and preſerv'd from decay, during the remainder of our lives. Now, the hindrances of a regular Nutrition, are ſuch as relate either to the deficiency or want of due nouriſhment; or to its redundancy, or to its depravation.

CHAP.

CHAP. I.

Of a Consumption and Phthisic.

NUtrition is deficient when the Bones, Cartilages, and Membranes wither; and the fat and muscular flesh, which are only capable of Consumption, are accordingly consum'd. If the fat alone be melted down, it amounts to no more than a leanness; but if the dewy Muscles are consum'd without restoration, we call it a Tabes, or formed Consumption.

The causes of a Consumption relate either to the Spirits or nutritious Juice. The former are the deficiency or dissipation of the Spirits; the one caus'd by the vicious Crasis of Blood, or Indisposition of the Brain; the other by Fatigue, Venery, Study or Grief. Those relating to the nutritious Matter, are first its defect, occasion'd by the scarcity or want of proper Food, and consequently of Chyle; the obstruction of the Vasa lactea, the Schirrous Tumors of the Pylorus, or those of the Mesentery, so frequently met with; the compression or wounding of the Ductus of the Breast; all which cut off the Communication of the Chyle with the Blood; Worms in the Guts sucking up the Chyle: Excessive evacuations of the nutritious Juice, either in Company with the Blood, in excessive Bleedings, or otherwise by Looseneſſes, immoderate Sweats, runnings of the Reins, Whites, Ulcers, and excessive Venery. The second cause relating to the nutritious Juice, is its depravation, occasion'd either by a weak digestion in the Stomac, or the saltness and viscidity of the Blood or Lymph, that follows Acute or Intermitting Fevers, or retains to Scorbutic and Hypocondriac Constitutions.

Infine, the Crudities of the Stomac, and degeneracy of the Blood, are the common causes of a Consumption, and reciprocally promote one another. The former occasion a saline putrid taste in the Mouth, and provoke the Lungs and Larynx to Cough, as they pass after joyning the Blood. The latter, *viz.* The degeneracy of the Blood, renders it unfit

unfit for nouriſhing the Parts; and is occaſion'd either by the crudity of the Chyle, or the Ulcer of ſome Bowel or external Part that taints it as it paſſes. In which laſt caſe, it procures a Phthiſic.

A Phthiſic therefore is generally taken for a Conſumption, ariſing from the Ulcer of any Bowel or external part, as of the Reins, Liver, and eſpecially the Lungs, which are moſt liable to be vitiated by the Air, and the recrements of degenerate Blood. 'Tis diſtinguiſhed from a Vomica of the Lungs by this Mark, *viz.* That the latter is a cloſe Ulcer, inclos'd within its own Membranes, and fill'd with laudable Pus; whereas a Phthiſical Ulcer is open, and voids ſordid corrupt Matter.

Tho' a Phthiſic be generally imputed to an Ulcer of the Lungs, yet it may ariſe from the Corrugation, Schirrus, or any other diſorder of the Lungs or Bowels, that diſturbs and depraves the Blood. Its remote cauſes are: The Acrimony and Saltneſs of the Blood or Lymph, which is frequently owing to Crudities from the Stomac; and was repreſented by the Ancients, as a Catarrh or defluxion from the Head. Wounds, Bruiſes, clotted Blood or heterogeneous Matter in the Breaſt, Inflammations of the Lungs or Pleura ending in Suppuration; the Corroſion of the ſmall Pox; corroſive ſteams, as thoſe of Aqua-fortis, Quick-lime, *&c.* Drinking of Acid Tartareous Wines or Vinegar; ſmoaking Tobacco, irregular Paſſions of the Mind, *&c.* A Phthiſic propagates it ſelf by a hereditary Succeſſion, and is ſo very Contagious that the breath of a Phthiſical Perſon will corrupt the Lungs of another, and convey its virulency thro' the Breaſts of a ſuckling Woman.

The ſigns of a Conſumption are theſe, a ſharp Noſe, hollow Eyes, low Temples, the Laps of the Ears contracted, the Fore-head dry and hard, the Complexion pale and livid, the Ribs and Shoulder-blades bend outward, the Cartilage of the Breaſt is bow'd, the Back bone ſharp and prominent, the Belly falls low, the Hips are looſe or quite conſum'd, the Legs, Arms, Feet and Hands, are dry; the Knuckles protuberant, the Nails bow'd, the Skin wrinkled and flaggy, the Urine is cover'd with Fat, the Veins of the Body are every where apparent, and the Hairs fall off. Nocturnal Sweats are common to all Phthiſical Perſons; and melting Looſeneſſes and Swellings of the Feet, conclude the Tragedy.

If a Consumption or Phthisic proceed from an obstruction of the Glandules of the Mesentery, intercepting the Chyle, the Belly is swelled, and molested with a hollow heavy Pain; the region of the Naval is hard, and the Excrements are liquid or mix'd with Chyle. If it proceed from a weak digestion, or Crudities from the Stomac; the Symptoms observe this order, *viz.* After much care, anger, drinking, or some such Error in the use of the not natural things, there insues a prostration of strength and inappetency, especially an aversion to meat; in the Morning an uncooth taste invades the Mouth, which, by degrees, becomes saltish, and is attended by a dry tickling Cough; in process of time, the taste of the Mouth becomes putrid, and resembles that of Ashes, or rotten Meat; the dry Cough prevails towards Night, and brings up some thin watery Matter; respiration is render'd difficult and the Breast oppress'd; especially after eating, at which time the whole Body, especially the palms of their Hands, are molested with Heat. The Pulse is always quick, frequent, and small. After some time, all these Symptoms increase, the Cough augments, and copiously brings up a viscous white, then yellow, green or livid, and at length a true purulent Matter; whereupon Night-sweats, a Hectic Fever, and a gradual decay insue. Infine, if a Phthisic of the Lungs be not externally occasion'd, or depend not upon a preceding Disease, such as a Pleurisie, or spitting of Blood, it always flows from the Stomac.

From this Induction, we may infer, that in the beginning of a Phthisie, the Cough does not always proceed from the Lungs, but from the Stomac: Nay, sometimes tho' the Lungs be ulcerated, if the Matter do not irritate the Bronchia, there insues no Cough at all. Besides, the Matter which is expectorated by coughing, is not always bred in the Lungs, for 'tis sometimes taken from other ulcerated parts by the Blood. In which case, 'tis a difficult matter to trace out the part to which the Ulcer belongs. But in general, if it lodge in the Abdomen, the Symptoms of the Belly do discover it. If the Cough bring up no purulent Matter, we conclude that the Phthisic is owing to a Schirrus, or some such disorder among the Viscera. Now the purulency of this Matter is discover'd by its sinking in Water, whereas that which is only viscid, being porous and dilated with Air, swims above. To conclude, if the Lungs are exulcerated, the Cough sounds hollow

hollow and deep; and if they be much consum'd, are voided by pieces. If the right side be chiefly affected, the sick Person cannot lie but on the right side, and *è contra*.

A confirm'd Phthisic or Consumption is incurable; while 'tis yet but growing, there are some hopes; especially, if the Stomac is not much disorder'd. If it proceed from hard swellings in the Lungs, Schirrus's or Ulcers in the Bowels, from the Scurvy, the Whites, Dropsie, or running of the Reins, 'tis seldom cur'd. If the Cough disappear of a sudden, 'tis a Tragical Omen; as also if the Hair falls off, and the feet swell, or if the expectorated Matter stink when thrown upon burning Coals.

The Cure is compassed by removing the various Causes; mitigating the Symptoms, and projecting a method for nourishing the Body. For which end let the following Cautions be heedfully minded.

1. There's no Remedy whatsoever that equals Vomits, especially in the beginning, nor any case in which they are not convenient, except that of a spitting of Blood, and extream Weakness.

2. Purgation, Bleeding and Issues are of no use. The first is pernicious, and augments the Cough; or if in the beginning of a Phthisic, it be absolutely necessary to cleanse the first Passages, Rhubarb is the most proper Ingredient; the second is never allowable, unless a suppression of Blood require it; the third was introduc'd of old, in compliance with the exploded Fancy of a Phthsic's being caus'd by a Catarrh distilling from the Brain, which now we justly impute to the Stomac.

3. Sugar, Hony, and all sweet Syrups are hurtful. They putrifie in the Stomac, weaken its digestion, and promote the corrosion of the affected Bowel.

4. A Scorbutic Consumption is admirably accounted for by a Milk Diet, especially that of Goats Milk, mix'd with vulnerary and Anti-scorbutic Syrups.

5. Tho' an inveterate Phthisic do not admit of a perfect Cure, yet the Life may be drill'd on by a Milk Diet, using vulnerary Medicines, and changing the Air.

Milk is a Sovereign Remedy, when the Disease proceeds from a sharpness of the Blood or Lymph; it both cleanses with its Whey, and heals with its Butter. Indeed if it spring from the corruption of a Bowel, or default of the Stomac, 'tis improper, as being apt to curdle and putrifie in a deprav'd Stomac. Goats Milk, mix'd with the Spirit of

Scurvy

Scurvy-grass, or that of Sal-armoniac, is of excellent use in Scorbutic cases; but Woman's Milk suck'd immediately from the Breasts, without being exposed to the Air, and the Butter made of it, are preferable to any other. It will not be amiss to add a little Sugar, or Conserve of Roses to prevent Curdling. And when the Persons are confined to a Milk Diet, they ought to take of it three or four times a day, and use some exercise after taking it, in order to promote its quick distribution; and, in the interim, eat nothing else but Raisins, or Food of very easie digestion. Note, before the use of Milk, 'tis advisable to exhibit a Vomit.

The Yelk of Eggs dissolved in Wine, and mixed with a little Ambergrise, are of admirable use in Venereal Consumptions.

The Decoctions of Elecampane-roots, with Raisins and Liquorice, and a little Spanish Wine, are of noted efficacy against all Phthisics; to which we may add, sweet Almonds, and Emulsions of Milky Seeds, Oysters, Crayfish mixed with Butter, Cockles, and all temperate Ingredients. In the beginning of the Disease, especially when it proceeds from the Stomac, Acids, such as the Spirit of Salt, Nitrum Antimoniatum, Terra foliata Tartari, distill'd Vinegar with Crabs-Eyes dissolv'd in it; Sal-armoniac, *&c.* are recommended upon the account of their Stomachical Virtue. But, after the confirmation of the Disease, or an Ulcer in the Lungs, both these, and all Spaw-Waters ought to be equally avoided. And as for the sharpness of the Blood and Lymph, which vitiates the Lungs, and is generally the Cause of those Phthisics that the Ancients refer to Catarrhs from the Head; Sulphur is a proper Remedy. It contains both Acid and Balmy parts; the former are pernicious, and ought to be carefully separated from the latter. Thus, the Flowers of Sulphur nicely prepar'd, and the Balsam of Sulphur prepar'd with distill'd Oyl of Aniseeds, are incomparable Medicines. If a Hectic and Night-sweats prevail, perhaps the Balsam of Sulphur prepared with distilled Oyls, may prove too hot; in which case let it be prepar'd with the Oyl of Sweet Almonds, adding but a few drops of distilled Oyl of Aniseed, this last alone being a noble Pectoral. Or the heat of the Balsam may be restrain'd, by adding the Sugar of Lead, or the Anti-phthisical Tincture of two parts of Vitriol of Steel, and one of Sugar of Lead infus'd in rectified Spirit of Wine,

Wine, or the dewy Phlegm of Vitriol, that's free of Acidity, rectifi'd upon its own *Caput mortuum*. The Tincture of blood-ſtone, or that of the Sulphur of Vitriol, are alſo fit to be added.

In the room of common Sulphur, ſome chuſe the Mineral fix'd Sulphers, ſuch as Diaphoretic Antimony, *Poterius*'s Antihectic, and all preparations from Antimony fixed with Tin and Steel. To theſe we joyn other balmy Ingredients, *viz.* Amber, Aloes, Myrrh, eſpecially when the Phthiſic is not far advanc'd, nor the Hectic very troubleſome; Together with the Pectoral ſpecifics, *viz.* Tragacanth, Elecampane Roots, Sperma Cæti (given to half a dram in a poatch'd Egg) Orris Roots, the Conſerve of Roſes, bole Armenic, ſeal'd Earth, blood Stone, and the Muſhroom of a Willow (given to half a dram in the Conſerve of Ground Ivy) all which are very uſeful for tempering the Acrimony of the Blood and Chyle. But before we commence the uſe of Specifics, a Vomit ought to be exhibited, for cleanſing the firſt Paſſages.

The Decoctions of Woods, eſpecially China and Saſſafras together with Elecampane, Liquorice, Raiſins and Vulnerary Ingredients, are of ſingular efficacy in this Caſe. Their Roſinous Sulphureous ſubſtance is at once qualify'd for tempering the ſharpneſs of the Humors, evacuating the corrupt Matter, and cleanſig the Ulcer. But whoever would reap benefit by theſe Decoctions, muſt reſolve to drink nothing elſe.

Narcotics, eſpecially the Pills of Storax, are of good uſe for promoting the Maturation and Concoction of the Matter in the Lungs, curbing the dry Night Coughs, and preventing Night Sweats. Phthiſical perſons admit of large Doſes, and perſiſt long in the uſe of 'em without detriment. Towards the height of the Diſeaſe, when Reſpiration is difficult, and a great deal of viſcous matter lies ready for expectoration, 'tis convenient to diſcontinue their uſe.

In regard of the ulcerated Bowel, the vulnerary Specifics, and the balmy Ingredients above-mentioned, are calculated for its relief. Ground Ivy, Chervil, Scabious and Male Speedwel, eſpecially the firſt, or its Juice, ought never to be omitted. Some commend Indian Creſſes and Roſaſolis. In Scorbutic Caſes 'tis proper to add Antiſcorbutic Ingredients.

If the Hectic do not prohibit the uſe of Balſams, we may add the Balſam of Sulphur, Balſam of *Peru*, Turpentine diſſolv'd with the yelk of an Egg, Myrrh, *&c.*

Some

Some recommend the Decoction of Penny-Royal. Others the volatil Salt of Hartshorn and its Spirit Tinctur'd with Balsam of Sulphur, the Spirit of Ants, the Spirit and volatil Salt of Man's Urine, and the like; but if the Disease be inveterate, and the Lungs ulcerated, they are very improper. Perhaps after chronical Diseases, or when the Chyle is not distributed thro' the Body, they may be of some use.

The dry tickling Cough and Night-sweats, that usually molest Phthisical Persons, are abated by incrassating Medicines, mix'd with Opiates. But Treacle and hot Compositions ought to be avoided.

For cleansing the Ulcer in the Lungs, and bringing up the viscous Matter, the Syrup of Tobacco ought to be mixed with the other expectorating Ingredients. And if the Matter stink, or if the Person spit very much, let Myrrh and Hony be always added. But if a Fever or melting Looseness accompany a Phthisic, let Hony be avoided, and absorbent earthy Powders exhibited.

The Food of Phthisical Persons ought to be such as yields a substantial glutinous Juice, namely Eggs, Raisins, Oysters, River Crabs, and Milk. They ought to avoid drinking much, and what they drink may be impregnated with Fumes of Sulphur. Of Wines the sweetest are the best. As for Air; those that are emaciated and wither'd, require a thick Sulphureous Air; whereas those that are otherwise find their account in breathing in a clear dry Air.

It remains now to subjoin a few Receipts, in order to exemplifie the complication of the above-mention'd Ingredients.

Take of Sal-armoniac and Nitre purify'd, of each half an ounce; the Powders of the Roots of Liquorice and Florentine Orris, of each an ounce. Mix and Exhibit as much as will lie upon the point of a Knife Morning and Evening, remembring still the Cautions above-mentioned, with respect to Acids.

Take of the Roots of Cuckow-pint, four ounces; Roots of Florentine Orris, three ounces; Flowers of Benzoin, an ounce and a half; Flowers of Sulphur, an ounce; *Poterius's* Antihectic, two ounces; with a sufficient quantity of Sugar make a Powder, to be given to a dram before Supper, and at Bed time, in the Decoction of China Roots, for tempering the Acrimony of the Humors.

Take of the kernel of the Pine Apple, half an ounce; white Poppy Seeds, two drams; with Scabious and Colts-foot Water, make an Emulsion, to which add of Ivory prepar'd without fire, half a dram; prepar'd Crabs Eyes and Mother of Pearls, of each a scruple; and sweeten it with Pearled Sugar.

Take of Diaphoretic Antimony, a dram and a half; Flowers of Sulphur, half a Dram; the Powder Diaireos; and Diatragacanthon Frigidæ, and prepar'd white Amber, of each a dram; extract of Elecampane half a dram; Balsam of Sulphur anisated, half a dram; Sugar dissolv'd in Fennel Water, four ounces. Make Tablets, of which take eight thrice a day, follow'd by a draught of the Decoction of Ground Ivy and Chervil.

Take of the Conserve of Ground Ivy, an ou[illegible] Eyes and *Poterius*'s Antihectic, of each half a dra[illegible] Amber, two scruples; Benzoin, a scruple; with *Willis*'s [illegible]rup Diasulphuris, make an Electury; and add some grains of Laudanum Opiatum, if it be convenient.

Take of Guajacum Wood, three ounces; Guajacum Roots, and China Roots, of each an ounce; Elecampane and Burdock Roots, of each two ounces; Juniper-berries three drams; Leaves of Speedwel, two handfuls; Ground Ivy, a handful. Infuse 'em for twenty four hours, in twelve pound of fair Water. Then boyl the half away, and add towards the end Anis and Fennel Seeds, of each an ounce and a half; Liquorice Roots, an ounce. Strain the Liquor, and exhibit a draught every Morning, adding twelve drops of the Turpentine Balsam of Sulphur, or forty of that prepar'd with Oyl of sweet Almonds.

Take of Ground Ivy, Chervil, and Male Speedwel, of each a handful; Elecampane Roots, an ounce and a half; Roots of Florentine Orris, an ounce; Anis-seeds, three drams, Fennel-seed, two drams; Figs four in number; Corents, an ounce and a half; Liquorice Roots, six drams; boyl them in Water for a vulnerary Decoction, to be sweeten'd with the Syrup of Ground Ivy. And add to every draught forty drops of Elixir Proprietatis, or half a dram of Sperma Cæti, or some drops of the Essence of Gum Ammoniac mix'd with the Tincture of Sulphur.

Take of *Poterius*'s Antihectic, a scruple; Sugar of Lead, half a scruple; Extract of Saffron, four or five grains; Laudanum Opiatum, two or four grains. With Balsam of *Peru* make Pills, for two Doses, to be taken at Night to prevent Coughing and Sweating in the Night time.

Take

Take of prepar'd Amber, half a ſcruple; choice Myrrh and volatil Salt of Amber, of each five grains; Laudanum Opiatum, a grain or two. With the Eſſence of Myrrh make Pills.

Take of the Conſerve of Ground Ivy, Conſerve of Scabious, of each an ounce and a half; freſh Pine Apples, half an ounce; Ivory prepar'd without fire a dram; *Poterius*'s Antihectic and Flowers of Sulphur, of each two ſcruples. With Syrup of Tobacco make an Electuary, for attanuating and expectorating viſcid Matter.

Having diſpatch'd the general Conſumption of the Body, 'twill not be improper in this place to take notice of the dryneſs or decay of particular parts of the Body, occaſion'd by [illegible] intercepts the Blood or Spirits in their Paſſage [illegible] weakens and exhauſts the innate Spirit of the [illegible], whoſe office it is to ferment and aſſimulate the nutritious Juice. Hence Palſies, Convulſions, Diſlocations, Falls, Bruiſes, Wounds, *&c.* are its uſual Cauſes. As for Cure; *Wurzius* his Arcanum of Allum is a Catholicon againſt all dry'd or wither'd parts. 'Tis this.

Take of Plumous Allum, and melted Salt, of each equal quantities, melt 'em over a ſtrong Fire. Then ſet 'em to cool, and they will condenſate into a ſtone, upon which pour Water to diſſolve the Salts, and precipitate the Arcanum. Of which take three ounces, and mix 'em with an ounce and a half of the Oyl of Bricks, and four ounces of the Oyl of human fat, diſtill'd with the Aſhes of Vine-twigs. Make a Liniment, and anoint the part after rubbing.

If the dryneſs of the part be occaſion'd by a Wound or Efflux of its ſpirituous Juice, temperate hot things, and ſuch as are moiſt, or inrich'd with a Dewy Juice, are beſt. Hence ſome order the part to be drench'd in the Blood of an Ox juſt killed, and fomented with the Decoction of the Feet, Head, Liver, and Lungs, and other joints of a Sheep or Calf, boyl'd to rags; or anointed with the Juice of River Crabs, mix'd with the Oyl of ſweat Almonds; or with an Ointment of equal quantities of the fat of Herns, the fat of Frogs, and that of Hogs. If the drineſs be caus'd by a Palſie or Compreſſion of the Tendons, without any viſible Wound or Hurt, hot irritating things are moſt proper; as if the part be ſtrongly rub'd down three or four times a day with green Nettles, till it become red and hot, and then cover'd with the Liniment of the Arcanum of Allum, or fomented with the following Water.

Take of the Seeds of Roman Nettles, one pound; the Roots of Horſe Radiſhes bruis'd, from four ounces to half a pound; Roots of Cuckow-pint four ounces; long Pepper, three ounces. Digeſt 'em in white Wine fourteen days, in a Balneum Mariæ, ſhaking the Veſſel often. And then diſtil the Spirit, which is of excellent uſe when the part is num'd and ſtupid.

If a Defluxion or Catarrh falling upon the part give riſe to its decay, let Sudorifics be taken inwardly; and the Spirit of Ants, and that of Earth Worms, rectify'd with ſome Alcalin Salt, or the Aqua Articularis, mix'd with the Spirit of Sal-armoniac and Oyl of Soap, or the Ointment of Agrippa, be applied outwardly, the part being firſt rub'd down, 'till it become red or ſenſible.

CHAP. II.

Of Immoderate Nutrition or Corpulency.

IF the nutritious Juice be too copiouſly diſtributed thro' the Body, the Muſcles and Joints are extended, and for want of room are diſabled to recoil and contract themſelves with due nimbleneſs, and the Belly being over charg'd with Fat and Juice inlarges its dimenſions. So that the true cauſe of Corpulency or fatneſs is the temperate ſoftneſs of the Blood, the leſs Conſumption of the nutritious Juice, by reaſon of a ſlow Fermentation, and the late aſſimilation of the Chyle in company of the Blood, giving it opportunity to be coagulated and appropriated, by the peculiar acid Spirits that guard the reſpective Parts.

The remote cauſes of fatneſs are abſtinence from drink, eſpecially Hop'd Beer, or Ale made of Malt; or whatever dilutes the nutritious Juice, and conſequently promotes its exhalation; drinking moderately Ale made of Corn, which has a peculiar fattening Vertue; eating much Bread, which promotes the Fermentation and Digeſtion of Food; much ſleep, freedom from Care, Exerciſe and Venery.

Corpu-

Corpulency squeezes the Spermatic Vessels, and causes Barrenness, nay, it oppresses all the Vessels in the Body, retards the Motion of the blood, anticipates the matter that should be converted into Spirits, cramps all muscular Motions, and accelerates Death.

The Cure is compass'd by preventing the immoderate increase of Chyle, or evacuating it before its Assimilation to the Part, or melting and diluting it with Serum after its appropriation. The first design is answer'd by a spare thin Diet, and eating of salt Meat. The second and third by Purgation with Extractum Catholicum, and sweet Mercury repeated till it salivate; or the Pills of Aloes, and Elixir Proprietatis, which was known among the Ancients for a drying Medicine. Now that which they call'd drying, is nothing but the melting down of the nutritious Juice. Hence Myrrh, Gentian, Wormwood, Cresses, and all Diuretic or Diaphoretic Ingredients are of use, by reason of their attenuating resolving Quality. But Vinegar of Squills, Tartar, Tartar Vitriolated, Nitre, and all Acids, are intitled to a preference. Bleeding, Issues, chewing Medicines, the Decoctions of Woods, Venery, and in a word, whatever attenuates the nutritious Juice, and dilutes it with a serous Vehicle in order to evacuation, either by Urine, Sweat, or otherwise, is recommended against Fatness. Only this Caution ought to be taken notice of, that sudden and liberal Evacuations are apt to weaken fat People. To conclude, I subjoyn a Recipe for Pills that are much approv'd.

Take of the Gum of the Juniper Tree, two drams; choice Myrrh, Shavings of Lignum Sanctum, extract of Wormwood and Aloe, of each a scruple, coagulated Spirit of Vitriol, half a dram. Make Pills.

CHAP. III.

Of a depravʼd Nutrition.

ART. I.

Of a Cachexy, Leucophlegmacy and Anaſarca.

IF the Chyle or Nutritious Juice is not duly digeſted and aſſimilated to the Blood, it Tinctures it with a pituitous Crudity, ſtifles its ſaline Particles, and cramps its due turgeſcence; whereupon the Skin is diſcoloured, and the Muſcles inſtead of receiving elaborate nouriſhment are ſtuff'd and bloated up with crude Matter, and ſo render'd flaccid: This we call a Leucophlegmacy. And if this crude vicious Juice obſtruct the Glandules of the Muſcles, or if the Lymph be upon any account obliged to ſtagnate, the Blood becomes ſerous, and a Collection of Serum or Water lodg'd under the Skin cauſes an Anaſarca. Now a Cachexy is a general Term importing the Crudity of the Maſs of Blood, and its weaker Fermentation, which give riſe to theſe two Diſeaſes. The remote Cauſes are want of motion, care, grief, ſuppreſſion of the Terms, Chronical Diſeaſes, ſuppreſſion of Urine, the *French* Pox; and in a word, whatever weakens Digeſtion, and ſtifles the Fermentation of the Blood.

The Symptoms obſerve the following Method. The Cachectic Perſon grows pale, and in ſome meaſure livid; his Face, and in proceſs of time the whole ſurface of the Body is ſwollen; upon any quick motion or walking upon aſcent he is troubled with a ſhortneſs of breath, and palpitation of the Heart and temporal Arteries; an univerſal wearineſs ſeizes the Joints, and after eating, Anxiety and a ſenſe of Compreſſion oft times invades the Breaſt; the Appetite, which at firſt is good, decays by degrees; the Pulſe is unequal, ſmall, frequent

quent and weak; the Urine, which at first is crude, pale and watery, towards the height of the Disease becomes thick, and deposites a white Sediment; and finally the Person is seiz'd with a slow Fever, scarce perceivable by himself, and is oft-times thirsty and costive.

Thus far the Disease is only denominated a Cachexy. But afterwards the whole Body becomes very turgid, especially the Feet and Belly; the Skin grows thick and pale, and when press'd by one's Finger receives durable Pits, which intitle it to the Character of a Leucophlegmacy: Whereas an Anasarca requires that these Pits should quickly disappear, and that a shining Colour cover the swelling.

Cachexies are apt to invade Women, or those who confine themselves to a sedentary Life; and if the Woman be past the season of her Terms: They prove very tedious: If they succeed to acute or intermitting Fevers, or mismanag'd chronical Diseases, they are not easily cur'd.

The Cure consists in attenuating, correcting and evacuating the Crudities of the first Passages, whetting the Bile, vanquishing the vicious Acid, and strengthening the Stomac. For these Ends we ought to be cautious of giving strong Purgatives, or forcing the Cure too violently. The better way is to proceed by degrees, first to prepare the Crudities of the first Passages by digestive Salts, such as the Hypocondriac digestive Salt, given to half a dram twice a day, Tartar vitriolated, Sal-armoniac, and the Tincture of Tartar mix'd with absorbent Powders, *viz.* Coral, seal'd Earth, Bezoardicum martiale, and *Poterius*'s Antihectic (made of the Regulus of Antimony, Tin and Nitre.) Then to exhibit a Vomit, such as the Conserve of Hedge-Hyssop, given from a dram to two drams; or the Decoction of Hedge-Hyssop in Wine, *&c.* Or, if a Vomit be improper, to order a gentle Purge of the Extract of Esula, or Juice of common Orris, mixed with sweet Mercury, and Preparations from Gum Ammoniac.

The first Passages being thus cleans'd, we advance to Chalybeats, which ought to be continued for several Weeks, a gentle Laxative being interlac'd every Week, and the Patient remembring always to stir and move after taking 'em. If the peccant Acid be very rank, and the Stomac strong, we may give the filings of Steel, in Substance, or the natural and artificial Waters; otherwise Chalybeat Rhenish Wine, impregnated with Aromatic Herbs, or rather the Extract of Steel prepar'd with Juice of Apples, or that ascrib'd to *Mynsichtius*,

ſichtius, or the Tincture of the Vitriol of Steel and Bezoardicum Martiale, will anſwer the deſign.

After the uſe of Steel is the proper Seaſon for exhibiting the Infuſions or Decoctions of the ſharp, bitter aromatic Herbs and Spices, to which we add ſome gentle Laxative, eſpecially Rhubarb, which retrieves the Choler, and ſubdues the Acid. The Ingredients of this nature are Wormwood, Agrimony, Turmeric, leſſer Centory, Carduus Benedictus, Elecampane and Cuckow-pint Roots; Roſemary, Hyſſop, Mint, Horſe-Radiſhes, Creſſes, Scurvy-graſs, Cinnamon, Galangal, Zedoary, Cloves, Ginger, *&c.* The Rob of Juniper, and Pulp of Raiſins are much approv'd for the ſame effect; and if we add to them Extract of Steel, they prove more effectual. And after all, towards the end of the Cure, we order the Patient to take every Morning and Evening ſome drops of volatil ſaline Spirits, till he become perfectly well; ſuch are the Spirit of Sal-armoniac, or Elixir Proprietatis prepar'd with it, the Eſſence of Wormwood, the Carminative Spirit *de tribus*, the Nephritic Tincture, the Spirit of Hartſhorn ſuccinated, *&c.*

In a perfect Anaſarca the ſame Remedies are convenient. To which we may add the Lye made of Wine, and the Aſhes of Wormwood and Broom; ſudorific Decoctions of Woods and Juniper-berries, and that of Swallow-wort and Elecampane; the Seed of St. *John*'s Wort given to a dram in Wine, or diuretic Infuſions and Decoctions of Aſarabecca, Briony, red Ciches, *&c.* mix'd with Emmenagoga in a Suppreſſion of the Terms, (which frequently follows a Cachexy or Anaſarca.) In ſcorbutic caſes, let Earth-Worms be added to the Aromatic Decoctions.

Externally Burdock Leaves bruis'd, and applied to the Joynts and ſoles of the Feet, are very uſeful. The natural ſulphureous Baths are of known Efficacy; as alſo the dry Bagnois; or in the beginning and declination of the Diſeaſe, the way of procuring Sweat by kindling Spirit of Wine. Some order the Cachectic Body to be put into hot Sand. As for the Forms of preſcribing, they are as follows.

Take of Tartar vitriolated, two ſcruples; ſalt of Wormwood, and prepar'd Crabs Eyes, of each a ſcruple; diſtilled Oyl of Turpentine, ſix drops. Make a digeſtive Powder for three Doſes, to be exhibited before vomiting.

Take

Take of *Quercetanus*'s Pills of Ammoniac and sweet Mercury, of each fifteen grains; Extract of Troches Alhandal, a grain and a half. Make Pills for a gentle purge. 'Tis also very proper to add the Extract of Steel to all purging Pills.

Take of the filings of Steel, one part; Cinnamon in Powder, two parts; Sugar, three parts. Make a chalybeat Powder. Dose a dram.

Take of the Pulp of Raisins, six ounces; Extract of Steel prepar'd with Juice of Apples, three ounces; choice Rhubarb, three dams; with the Syrup of Apples make an Electuary. The solar Liquor of Steel may also be taken from twelve to thirty drops; or the solution of Steel in Juice of Apples mix'd with Spirit of Scurvy-grass, to fifty drops.

Take of Fumitory, Worm-wood, and Rosemary, of each a handful; Elecampane and Fennel roots, of each six drams; pick'd Senna, an ounce; black Hellebor roots, six drams; choice Rhubarb, three drams; the four greater hot Seeds, of each a dram and a half; Orange and Citron Peel, of each three drams; Galangal and Ginger, of each a dram; Salt of Tartar, two drams. Make a bag to be infus'd in Wine, of which let the Patient take a draught twice or thrice a day after having finish'd the course of Steel.

Take of Elixir Proprietatis without the Acid, an ounce; Essence of Wormwood, and that of lesser Centory, of each two drams. Mix them to be us'd in the declination of the Disease, to fifty drops every Morning in a warm Vehicle; and follow'd by fifty drops of Spirit of Sal armoniac mix'd with double its quantity of the Carminative Spirit *de tribus*, taken after, dinner, and at bed time.

ART. II.

Of an universal Dropsie.

A Dropsie is a Collection and Extravasation of Serum, causing a Distention, Tumor, and Softness in the external parts. Sometimes a viscous Humor accompanies the Serum, and then 'tis a spurious sort of Dropsie, complicated with an Anasarca. A Tympany goes generally by the name of a Dropsie, but for so much as it proceeds from Wind, we refer

fer it to the Chapter of Wind in the Stomac. A Dropſie is call'd univerſal, when it proceeds from the general infirmity of the Body. A particular Dropſie is owing to the infirmity of that part from which it receives its denomination. The moſt common ſort of Dropſie is that call'd Aſcites, which begins at the Feet, and in a ſhort time reaches the Belly and Scrotum.

This Serum, whoſe Extravaſation cauſes a Dropſie, for the moſt part is drop'd into the reſpective Cavities, by the Blood circulating in the Arteries. 'Tis true, the Rupture and Obſtruction of the Lymphatic and Milky Veſſels, may cauſe a Stagnation or Extravaſation; but that happens by accident. Whereas the ſtanding and direct ſource of Dropſies is the vicious Craſis of the Blood, as being unqualified for digeſting and aſſimilating its Serum; and its languid Motion, giving the Serum an opportunity of ſqueezing through the Veſſels, eſpecially about the Capillary Arteries, where the influence of the Heart (the *primum mobile*) is but very ſmall, and more eaſily communicable to the thick reſiſting Blood, than to the weak yielding Serum. Now that the ſlow motion of the Blood will occaſion a Tranſmiſſion of the Serum, is plainly made out by Dr. *Lower*'s Experiment of tying a Ligature about the Vena Cava, under the Heart; and that the vicious Craſis or Crudity of the Blood occaſions an imperfect Turgeſcence, and a weak Propulſion from the Heart, is too evident to need a proof. I grant that there are ſome melting Dropſies that proceed from the Colliquation of the Humors originally contain'd in the part, without the aſſiſtance of Foreign Serum, as in Hectic Fevers, and after hot acute Diſeaſes; but theſe are not proper Dropſies, as being only Symptoms of a Colliquation.

According to this Hypotheſis, we need not be at a loſs to ſcan the Influence of remote Cauſes. 'Tis an obvious Conjecture, that whatever weakens Digeſtion, accumulates Crudities, enfeebles the natural Functions, and, in a word, all Cachectic diſorders are apt to degenerate into Dropſies. The ſuppreſſion of Urine and that of inſenſible tranſpiration, are either the Cauſes or inſeparable Companions of a Dropſie. Nay, I doubt much if an univerſal Aſcites can ever take place, unleſs the Kidneys be diſorder'd. And 'tis a notorious obſervation to this purpoſe, that whoever drinks much, and does not piſs proportionably, may juſtly make account to encounter a Dropſie e're he dies; and that whoever attempts the

Cure

Cure of a Dropsie without Diuretic Medicines, is but lamely quip'd for his Office. The drinking of Brandy and Sulphureous Liquors that melt down the Humors, sharpen the Lymph and relaxate the Stomac; the inconsiderate use of cold Water, immediately after violent Heat; the suppression of any wonted Evacuation, and excess of any Flux, whether of Blood or other Humors; the attenuation of the Serum, by the use of Mercury: the Jaundice, and inactivity of the Bile; Chronical Agues mismanag'd: Asthma's, Phthisics and Spitting of Blood, and infine, whatever weakens Nature, renders the Blood uncapable to assimilate the Chyle, or retards its curcular Motion, and disturbs its due Tergescence: these, I say, are the natural Authors of a Dropsie. The tumors of the Mesentery, Liver, and other Bowels do generally accompany this Disease, but oft-times are rather effects than Causes.

The Symptoms of a Dropsie display themselves after this method: The Feet at first begin to swell, and receive Pits by the pressing of one's Finger; in the Night time the swelling abates, but regains new force the succeeding day. By degrees it reaches to the Abdomen and Scrotum, and frequently affects the Prepuce and Testicles. The Water thus inclos'd in the Belly sometimes possesses one side, sometimes both, and as the Person turns in his Bed it rolls, with a noise, and sometimes visibly, from one side to the other; in the mean while the Breast, Neck, and upper Parts waste and decay. The Face and Hands sometimes swell. An itching, and oft-times a scab, molests the Skin; and spots or wheals beset the Legs. A slow Fever pursues the Patient, and increases towards the Evening. The Pulse is small, frequent, and a little hard. An unquenchable Thirst, loss of Appetite, straitness of the Breast, shortness of Breath, especially in the Night time, and a dry Cough often times usher in a Dropsie.

Big belly'd Women are oft-times apt to suspect a Dropsie without occasion. The signs which serve to undeceive 'em are these. In a Dropsie the Face is pale and livid, the Eyes are rob'd of their sparkling Vigor, the Water contain'd in the Belly floats to and again, falls as the Woman turns her self, and is very weighty. The swelling is soft, equal, and bends downward; it does not impair the Flux of the Terms, but diminishes the quantity of Urine, and gives it a high Tincture, and causes a violent Thirst; all which Symptoms are contrary to those of being with Child.

The

The Hydropic Water is not always of the ſame colour, a being either Green, Yellow or Blackiſh, *&c.* But 'tis ge nerally ſaline and ſharp, apt to corrode the Bowels, an to cauſe Ulcers on the Legs, or to caſt a froth like Lather when mix'd with other Water; nay, the diſtention and ſtiff neſs of the Membranes in wrapping it ſeems to argue that i ferments within, and provokes them to Contractions.

As for Prognoſtics. If a Dropſie follow Chronical Dif eaſes, or indiſcreet Purgation, or invade thoſe whoſe ſtrength is decay'd; if it be attended by unſpeakable Thirſt, Cough ing, Schirrus of the Bowels, difficult Reſpiration, ſcarcity an redneſs of Urine, hardneſs of the Belly, extreme inappetency or a melting Fever, Ulcers or livid Spots in the Legs Black Excrements (when the Perſon does not uſe Steel) Theſe I ſay are diſmal Circumſtances, whereas the reverſ of 'em are look'd upon as hopeful ſigns. Convulſions an Apoplexies ſucceeding a Dropſie are very fatal.

The Cure turns upon two indications. 1. To remove th ſtagnating Serum. 2. To prevent its further increaſe b retrieving the due Craſis of the Blood, and fortifying th Stomac, in order to a regular Chylification.

The firſt is anſwer'd by Evacuations, and abſtaining fro drink.

Of evacuating Medicines, Purgatives are the firſt, eſpeci ally the Roots of the common Flower-de-luce, and Elaterium or the Juice of the wild Cucumber. The former does no only evacuate but enjoys alſo an alterative Vertue; and i given to three drams in Infuſion, or its Juice expreſs'd, t half an ounce, with a ſcruple of the Powder of Soldanell Elaterium, or its Extract prepar'd with Spirit of Wine Tar taris'd, given to fifteen grains, is fitly joyn'd with ſwee Mercury. The Infuſion or Decoction of half an ounce o Bryony, with Salt of Tartar, is of excellent uſe againſ Dropſies of the Womb. When the Serum is mix'd with vi cous Humors, Coloquintida, or the extract of Troches Al handal ought to be added. The lunar Pills made of th Cryſtals of well refin'd Silver, prepar'd with Spirit of Nitr or Aquafortis; or Mercurius Vitæ render'd Laxative, b mixing it with ſweet Mercury, are alſo noted Purges again Dropſies. To which we may add the Roſin of Jalap, th Infuſion of a handful of the Flowers of Acacia in Whey, th Syrup and Conſerve of Peach Flowers; Gutta Gamba, give in Powder to ſixteen grains, or its Roſin given to twel grains; the Infuſion of two or three drams of Hedge-Hyſſo

or its Conserve given to two drams. Syrup of Buckthorn, and the Rinds or Leaves of Elder. The proper season for exhibiting Purges to Hydropic Persons is immediately before the new Moon, when the Disease of it self relents; but if the Hydropic Water lodge in the Purse of the Caul, or duplicatur, of the Peritonæum, or Vesicles of the Mesentery, and not in the Cavities of the Womb, Purgation is of no use: And withal we ought to ramark that Purgatives ought to be mix'd with Stomachical Specifics, especially Wormwood; and not too often repeated, by reason that they melt down the laudable humors as well as the bad, and so indirectly strengthen the Disease; especially if they do not operate quickly after Administration.

If the Hydropic Person Vomit easily, or be molested with a shortness of breath, Vomits are useful. But they ought to be given in large Doses, otherwise they do not operate. Opiates in general are pernicious, tho' in some singular Instances they may pacifie the Spirits, appease the irritated Fibres of the Kidneys, and so indirectly promote an Evacuation by Urine.

Diuretics are the choicest evacuating Remedies. But they ought not to be exhibited till after the use of Laxatives, attenuating and opening Ingredients, nor us'd without the addition of Chalybeat or Corroborating Medicines. Asarum, Wormwood, Elecampane, and Gentian lead the Van. The Juice or Infusion of Celandin the greater, is a celebrated Specific; to which we may add the Decoction of Swallow-wort in Wine or its Extract, it being peculiarly calculated for such Dropsies as proceed from Scrophulous tumors in the Mesentery. Hore-hound is much recommended against a Hydropical Jaundice. The Infusion, Decoction, or Juice of Garlic is a powerful Diuretic, as also Turmerick and Madder. The Decoction, Infusion, Spirit and Rob of Juniper Wood and Berries are of excellent use, and seem to claim a preference before the Decoctions of Guajacum and Sassafras. The Juice of the Herb Kali given to half a dram is much applauded, but it ought not to be taken above three days in a week, for fear of over doing.

In those Dropsies which approach to Anasarca's, fix'd Salts are very serviceable, and perhaps preferable to other Diuretics. But in an Ascites 'tis not improper to shift 'em, for those of a volatil nitrous Character. The heads of the fix'd sort are the Lixivious Salts of Vine-twigs, Bean-stalks, Juniper

Juniper and Lime-tree wood. The volatil, are all the volati preparations of Tartar, the Spirit and Flowers of Sal-armoni ac, or Elixir Proprietatis prepar'd with it, and the volatil Sal of Hartſhorn; *Poppius* beſtows large Encomiums on th Spirit of Urine, rectifi'd with Spirit of Wine Amber griſe and Moſch, and given to half a dram, Morning an Evening; nay, Man's Urine, or that of Sheep is very ef fectual among poor People. *Crollius* recommends Gooſe dung given to a dram in diſtill'd Urine.

The Spirit of putrifi'd Earth-worms, given to ſixty drops, twice or thrice a day in Wine impregnated wit Juniper-berries; or the Liquor that flows, *per deliquium* from Earth-worms putrifi'd with Moſs of Earth, and ba ken with Dough in an Oven, given to a ſpoonful twice a day; the Powder of dry'd Toads, the Heads and Intrail being thrown away, given to a ſcruple three or four times in one day, but ſo as to intermit three or four days before it be us'd again; the Liquor which drops, *per deliquium*, from Cockle ſhells, coagulated with Spirit of Salt; the Powder of greaſie Beetles, or of Hog-lice; theſe (I ſay) are all approv'd for their Anti-hydropic Vertue.

Sudorifics are not proper in an Aſcites, by reaſon that they heat and fret the Serum, and diſſolve the Blood, ſo as to occaſion a further effuſion of Serum into the Cavities. In caſe of an Anaſarca, or when the Serum ſtagnates in the Glandules and Bowels, they are uſeful, and ought to be given in ſmall quantities, leſt a ſtronger force ſhould weaken the Patient. Juniper-wood, Millet-ſeeds, and Vegetable Aromatics, together with volatil Salts, are the moſt proper Ingredients; and ought to be adminiſter'd, in a liquid form. Sometimes Mercurial Salivations are alſo of uſe in deſperate Dropſies.

After the internal Remedies for evacuating the hydropical Serum; we come in the next place, to what aſſiſtance external Operations can afford. If the Navel be much rais'd we apply aperients to it; and if they do not open it, we tap it with a Needle. A Paracenteſis is alſo frequently perform on the ſide of the Belly with good ſucceſs. But we ought to remember, that in Dropſies, the Peritonæum is very thick; that 'tis dangerous to take out above eight or ten ounces of Water at once; that if the Diſeaſe be confirm'd, and the Bowels beſet with Schirrus's or already corroded by the Water; and if the larger Lymphatic Veſſels be broken, or if the Dropſie be univerſal, a Paracenteſis

tentesis is of no use. Sometimes, if Nature tend that way, the Scrotum opens of its self, or if it do not, 'tis artificially open'd with a Cautery or a Launce. But it ought to be carefully defended, by proper Preservatives, from a Gangrene; to which 'tis very liable. Slight scarrifications of the Legs are oft-times of good use; but the Wounds must be gently handled, and frequently fomented with the Spirit of Wine camphoris'd, in order to prevent a Gangrene. If Blisters rise in the Legs, we apply Cole-wort leaves to 'em; nay, oft-times the leaves of Water-Plantane bruis'd, and applied, raise blisters of themselves, which void a great deal of Serum; blistering Plaisters are us'd with good success; but they ought to be cautiously applied to the outermost Parts, because they extinguish the native heat and promote a Gangrene. Upon which account, Caustics, which fortifie the Part with an Eschara, and do not attract the Humors so violently, are more proper. But if the Disease be confirm'd, and if the Person be weak and cold, then they may introduce a Gangrene, or, at least, will only give vent to the Water under the Skin, as not being able to extend their influence to the Cavities. Some choose to pair the Nails of the Toes very close, and tye strait Ligatures upon the Parts. The former Stratagem drains the Water, and the latter cuts off all further Supplies, and forces the imprison'd Matter either to retire into the Lymphatic Vessels, or march out by the proper Passages.

Having thus dispatch'd the first Indication, we are arriv'd at the second, which was to corroborate the Stomac, and Crasis of the Blood; for which end Chalybeat Medicines ought to be mix'd with the above mention'd Ingredients, especially to Wormwood and Ground-Ivy; which last is of excellent use both inwardly and outwardly. The Salt of Wormwood coagulated with the Spirit of Salt; the Tincture of Tartar, Tincture of the Vitriol of Steel; the Terra foliata of Tartar, and the Lapis Fulminaris, pounded with Alcohol of Wine, and mix'd with the Powder of Snakes Cast-Coats, are much applauded for the same purpose.

If the Fibres of the Skin be weak and relaxated, it will not be improper to bath it with the Spirit of Wine and strong Waters; as for Astringent Fomentations, I doubt they do more harm than good. If the Vessels or Organs be broke, we may add vulnerary Ingredients to the above mention'd

mention'd Specifics. If the difficulty of breathing be very troubleſome, 'tis uſual to give a dram of Sperma Cæti in *Spaniſh* Wine, after vomiting. If Hydropical Perſons be extream thirſty, we muſt be very cautious of pleaſing them, or anſwering their demands, ſince abſtinence from drink is the better part of the Cure. Nitre melted in the Mouth, Wine temper'd with juice of Citrons, the dulcifi'd Spirit of Salt, Vinegar diluted with Chalybeat Water, and the Decoction of Juniper-berries in Whey, given for ordinary drinking, are of uſe for mitigating this Symptom.

In the mean while, it will not be improper to inject Clyſters of Hydropical Purgatives, and Aromatic Ingredients, or of Herrin-pickle, or of a Child's Urine, impregnated with Carminative Seeds in caſe of Wind; or mix'd with Turpentine and Nitre. Nor will it be amiſs to apply diſcuſſive Aromatics to the ſoles of the Feet, Belly and Cod. Such are the Leaves of Celandine the greater, bags quilted with Aromatic Seeds and Bran; Man's Ordure; Goats dung boil'd in Mint water, or mix'd with Man's Urine in the form of a Cataplaſm; Horſes dung mix'd after the ſame method, with Meal of Barley and Vinegar. Quick-lime-water mix'd with Spirit of Wine is of excellent uſe for bathing the Legs, Belly and Scrotum, eſpecially when a Gangrene is threaten'd, by the appearance of ſpots. Cataplaſms made of Cockles bruis'd together with their ſhells, and mix'd with Goats dung, are particularly recommended by *Thonerus*. If theſe Cataplaſms prove uneaſie, they may be ſhifted for Aromatic Oyls; ſuch as the Oyl of Scorpions, diſtill'd Oyl of Juniper, Oyl of Bays, Oyl of Toads, mix'd with the Ointments Agrippæ, Martiatum, *&c.* Or, an Ointment made of Sulphur, Quick-lime, and the Extracts of ſharp Plants. Some commend Bathing, but 'tis only of uſe againſt Anaſarca's.

It remains only to annex a few Recipe's for illuſtrating the Method of preſcribing.

Take of the Extract of Elaterium, fifteen or twenty grains; Roſin of Jalap, from two to five grains; Troches Alhandal, one or two grains; diſtill'd Oyl of Juniper, two drops. With Eſſence of Wormwood make Pills for a Hydropical Purge. To which we may premiſe the Tincture, Spirit or Salt of Tartar as a digeſtive.

Take

Take of the Conſerve of Peach-Flowers, a dram; twelve grains of Mercurius Vitæ, mix'd with fifteen grains of ſweet Mercury; Extract of Elaterium, a grain or two. With the Syrup of Buckthorn, make a purging Bolus for one Doſe.

Take of the Rob of Juniper, an ounce and a half; Extract of Steel prepar'd with juice of Apples, half an ounce; Powder of Rhubarb, two or three drams; with Cinnamon-Water, make an Electuary for corroborating the Stomac.

Take of Swallow-wort Roots, two ounces; Leaves of Celandine the greater, Hore-hound and Wormwood, of each a handful; Citron and Orange-peel, of each ſix drams; Seeds of the Aſh-tree, of Cumin, Fennel, and Annis, of each two or three drams; Juniper-berries bruis'd, an ounce and a half; Galangal, Cloves, Ginger, of each a dram; Salt of Tartar, ſix drams; infuſe them in Wine. Of which, let the Patient take a draught frequently.

Take of the Salt of Vine-twigs, or that of Pigeons dung, of each a dram; Powder of Toads, two ſcruples. Make a Powder for two Doſes.

Take of the Carminative Spirit *de tribus*, half an ounce; Spirit of Sal-armoniac, two drams. Mix. Doſe half a dram twice a day.

Take of the Decoction of Camomil flowers, half a pound; Man's Urine, three ounces; lenitive Electuary, ſix drams; diſtill'd Oyl of Turpentine, a ſcruple. Make a Clyſter.

Take of the Carminative Decoction, ſix ounces; Man's Urine, three ounces; Yeſt, a dram; common Salt, a ſcruple; Hony of Roſes, an ounce. Make a Clyſter.

Take of Cockles and their ſhells bruis'd, a pound; Powder of Caraway-ſeeds, two ounces; Goats dung, an ounce. Make a Cataplaſm, to be applied to the Belly and Cod.

Take of the Ointment of Sowbread, an ounce; Ointment of Agrippa, half an ounce; Oyl of Scorpions, an ounce and a half; diſtill'd Oyl of Toads, three drams. Mix for a Liniment, and anoint the Belly frequently.

ART. III.

Of the Yellow, Black and White Jaundice.

A Jaundice is a Cachectic diſpoſition of Body, attended by a preternatural Colour of the Skin; it is caus'd either by the corruption of the Chyle in the Stomac; or its vicious fermentation with the Bile and juice of the Pancreas in the Duodenum; or by the immediate putrification of the Maſs of Blood. The firſt cauſe defiles the Maſs of Blood, and taints it with various Recrements according to the manner of its Corruption. Hence Milk curdled in the Stomacs of Children, Summer-Fruits, Cucumbers, Fiſh, *&c.* being converted into a muſty Crudity will cauſe a Jaundice, by mixing the corrupt Chyle with the Blood, which being unfit for nouriſhment or aſſimilation, is thrown out in a ſerous Vehicle upon the Glandules of the Skin, and ſometimes upon internal Glandules.

The Jaundices which follow Fevers, or extreme bleeding, which are attended by vomiting of yellow corrupt Matter, muſty Belchings, Heart-burnings, and Excrements colour'd as in a healthy ſtate, ſeem to ariſe from this cauſe, and are accordingly cur'd by Vomits, and bitter ſtomachical Medicines.

The ſecond cauſe takes place when an Acid prevails, and the Bile is lazy or unactive, and either cannot make good its ſecretion through the Liver, and conſequently recoils into the Blood; or, when ſeparated, ſtagnates in the Gall-bladder, and hardens into Stones, ſo as to cauſe an Obſtruction of the Paſſage: Hence Sulphureous ſtrong Liquors, that exalt the Oyl of the Bile, and cramp its active volatil Salt, are frequently charg'd with cauſing a Jaundice. Sometimes the Convulſions of the neighbouring Membranes may contract the Gall-bladder, and ſo ſhut up the Paſſage, upon which account Vomiting, Cholic-pains, Hyſteric Paſſions, and hard Labour in Child-bearing, are obſerv'd to introduce this Diſeaſe. The prevalency of an Acid in the Duodenum, ariſing either from the auſtere Recrements of the Stomac, or the degeneracy of the juice of the Pancreas, will alſo pervert the Chyle, and conſequently the Maſs of Blood. So that the greateſt part of Jaundices are wholly owing to a preternatural corrupt Acid in the

Stomac

Stomac or Duodenum, and the inactivity or imperfect distribution of the Chyle.

As for the third Cause, *viz.* The immediate putrefaction of the Mass of Blood, 'tis occasion'd by Poyson, bitings of Vipers or Mad Dogs, malignant Ulcers, suppression of the Terms, the Scurvy, *&c.* And when a Jaundice springs from this cause, the Stomac, Bile, and colour of the Excrements continue in their natural state.

Now any of these three Causes will occasion a preternatural colour of the Skin, which always attends the Jaundice. For the Blood being vitiated and tinctur'd with corrupt Recrements, precipitates and throws 'em out in a serous Vehicle upon the Skin, where the miliar Glandules are most plentiful; and these vicious particles dye the Skin, according to their various texture. If an urinous Oyl prevail, the colour is yellow; if an Acid from the first Passages, it becomes green or black, and frequently a yellow Jaundice is converted to that of a green or black colour, by the growing prevalency of the Acid. 'Tis true, the Ancients fancy'd that the Yellow colour proceeded from a redundancy of Bile, and the black from a melancholic Humour imputed to the Spleen. But Experience teaches us, that the genuine Bile is apt to cause a red colour; that such Medicines as whet and volatilize the Bile, are proper against this Disease; that a yellow Jaundice becomes black without any influence from the Spleen, and that there are several yellow Jaundices, in which the Bile is not redundant nor stop'd in its passage, as those which proceed from corrupt Chyle bred in the Stomac, *&c.*

The Jaundice is call'd Secondary, when it follows other Diseases; and if it be accompany'd by signs of Concoction, 'tis Critical; if not, 'tis Symptomatical. But if it be independent, and come of it self, 'tis a Primary Disease; and is usher'd in by these Symptoms. First, a pressing straitning Pain girds the Breast, wearines possesses the Limbs, a loathing invades the Stomac, the respiration becomes difficult; and Giddines, Head-aches, and Swoonings sometimes close up the rear. The Urine at first is pale, afterwards (when the Blood begins to precipitate its Recrements) it becomes thick, obscure, as of a dark red colour, and dies a cloath yellow like Saffron. The Whites of the Eyes being enrich'd with many little Arteries, appear yellow, the Mouth is dry, and frequently molested with a bitter taste, and aversion to Ale. Sometimes a Fever ac-

companies a Jaundice, and ſometimes it does not. When the Bile is ſtopp'd, the Belly is coſtive, the Excrements white, and a violent pain moleſts the right Hypocondrium, as being ſuppos'd to proceed from Stones in the Gall-bladder. In other caſes, the Belly is open, and the Excrements repreſent a bilious colour. A Jaundice is dangerous when 'tis black, or proceeds from a prevailing Acid, or ſucceeds to Chronical Diſeaſes, Quartan Fevers, obſtructions of the Liver or Spleen, or Stones in the Gall-bladder; in which laſt caſe, tho' cur'd, it frequently relapſes. When the Urine becomes thick and black, it prognoſticates a happy delivery.

The Cure conſiſts in correcting the Acid and Auſtere Ferment, proceeding from the Stomac and Inteſtines: Or retrieving the due texture and diſtribution of the Bile; and promoting the ſeparation of the heterogeneous Particles. To obtain theſe ends, let an Antimonial Vomit be firſt exhibited. Purgation is improper, eſpecially when the Veſſels of the Gall are ſtraiten'd, rather than obſtructed; in which, the Vomits themſelves are not ſo uſeful as in other caſes. If it be needful to clear the Paſſages, Gum Ammoniac, and Tartar vitriolated, or ſome ſuch laxative, will ſuffice.

Of Specific Alteratives, the filings of Steel, or its Extract prepar'd with juice of Apples, or Chalybeat Wine, and prepar'd Blood-ſtone, which partakes much of Steel, are much the beſt; to which we join the juice, infuſion, or decoction of Celandine Roots in Wine; the Eſſence, Extract or Decoction of Hore-hound; the Powder of Columbine-Seeds; the Conſerve of the Flowers of Broom, and St. *John*'s-Wort; the Powder of Madder Roots; the Tincture, or Eſſence of Swallow-wort; the Decoctions of Silver-weed, Agrimony, Wormwood, leſſer Centory, Southernwood, the five opening Roots, *&c.* Some recommend the Decoction of Raiſins and Straw-berry-leaves, for ordinary drinking.

Beſides the Vegetable Specifics, Earth-Worms or Wood-lice, given in Powder to a dram; or the Spirit prepar'd from 'em; the Spirit and Tincture of Tartar, the Carminative Spirit *de tribus*, (drawn from Tartar, Nitre and Spirit of of Wine) the Spirit of Sal armoniac, Spirit of Man's Urine; and the Urine it ſelf drunk with the juice of Hore-hound; theſe, I ſay, are all of noted efficacy. The dung of Geeſe, or that of other Animals, given in Powder to a dram, is much approv'd. Some recommend the Stone taken out of the

the Gall of an Ox, given to a dram; and the Bezoar Stone; or the *Lapis Fulminaris*, given to half a dram. Some order three or four living Lice to be swallow'd.

In the declination of the Disease, gentle Laxatives mix'd with the above mention'd Specifics, are allowable, especially Rhubarb given in Powder or Infusion; or the Infusion of Senna with Salt of Tartar; or the Flowers of Acacia, or those of the wild Plum-tree, infus'd in Wine, or in the ordinary drink. In a black Jaundice, the Extract of black Hellebor, mix'd with that of Steel, and Gum Ammoniac, is very useful.

These are the internal Medicines, proper to be given against a Jaundice, as being all calculated for sharpening the Bile, subduing Acids, and promoting a regular Chylification: In the use of which, we ought still to continue 'till the Urine become thick and black.

Externally some apply the Leaves of lesser Centory, or Celandine Roots to the soles of the Feet; and bath the Body in hot Water, impregnated with Specific Plants, in order to open its Pores; or rub it all over with bags of the Meal of Barley and Beans dipp'd in hot Water. Cataplasms of the Leaves of Hore-hound, Celandine Roots, and Misleto of the Oak, beaten up with Wine and Vinegar, and applied to the Feet, are of excellent use for big-belly'd Women, who dare not venture upon the use of internal Specifics.

It remains only to annex a few Examples of Recipe's.

Take of Aloes and Extract of lesser Centory, of each a scruple; Extract of Troches Alhandal, six grains; Mercurius Vitæ, two grains. Make Pills for four Doses.

Take of Columbine Seeds, six drams: With Celandine-Water make an Emulsion; to which add Powder of Ivory, a dram and a half.

Take of Columbine Seeds in Powder, six drams; Saffron, one dram; Tartar vitriolate, half a dram. Make a Powder for seven Doses, to be taken in Rhenish Wine.

Take of Chalybeat Diaphoretice Antimony, and Turmeric-Roots, of each a half a dram; volatil Salt of Hartshorn, half a scruple. Make a Powder for two Doses.

Take of Madder-roots, and those of Celandine, of each an ounce; Leaves of Hore-hound, and tops of Wormwood, of each a handful; Salt of Tartar, two drams. Make a Bag to be infus'd in Wine.

Take of the Pulp of Raiſins, half a pound; choice Rhubarb, three drams; Tartar vitriolated, two drams. With Syrup of Cichory with Rhubarb, make an Electuary.

ART. IV.

Of the French Pox.

THE Symptoms of the French Pox diſplay themſelves moſt in the part, thro' which the virulency is firſt convey'd. If a Nurſe be infected by a ſucking Child, her Breaſts are firſt attack'd; if the Diſeaſe be contracted by lying in Bed with a foul Perſon, the Skin and ſurface of the Body are the chief place where its Retainers aſſemble. If the Embraces of a foul Woman give being to it, the Yard, Groin, and adjacent Parts are the firſt Scene of its tragical appearance. About two or three days after the Venereal Adventure, a Heat and Inflammation ſeizes the Genitals, the Urine ſcalds, a ſharp corroding Matter iſſues from the Yard, inflames the Prepuce, and beſets it with Puſhes, which in tract of time degenerate into Ulcers; Bubo's, or hard ſwellings appear in the Groin; Red, yellowiſh ſpots are obſerv'd in the Belly, Breaſt, Back and Privities, which when preſs'd, aſſume a whitiſh colour, but quickly retrieve the former. In proceſs of time, the Wheals or Ulcers ſpread over the Body, eſpecially the Forehead, Face and Palate; their colour is livid, inclining to a yellow; ſometimes they are dry, ſcaly, and of an unequal ſurface; at other times they void ſharp corrupt Matter, which frequently corrodes the ſpungy bones of the Noſe and Palate. The bones are cover'd with hard ſtony Concretions, and the Limbs tortur'd with violent Night-pains, but ſo as that the Joints are free; and in inveterate caſes, become corrupt and rotten. Little Swellings call'd Condylomata, cover the breech, and cruſty Warts invade many parts of the Body. The Palms of the Hands, and Soles of the Feet are chopp'd and moleſted with a burning Heat; the Hairs fall off from the Head, Eye-lids, *&c.* the Palate of the Throat being relaxated or corroded, alters the Voice; the Ears tingle; and in fine, the whole Body becomes mangy and ſordid, and, by degrees, moulders away. The Symptoms of Women differ not from thoſe of Men, excepting what regards the form of their Genitals.

The

The material cause of the Pox is a corrosive acid Ferment joyn'd to a viscid Vehicle, which affects chiefly the Glandulous and Nervous Parts; it depraves the Lymph and Serum, the nutritious juice of the Bones, and the dewy Liquors of the whole Body; it corrodes the solid parts; twitches the Membranes, and is every way qualified for being the bane of Life, and ruin of Mankind. 'Tis very infectious, and oft-times propagates it self among Bed-fellows, by Sweat or Matter issuing from the Ulcers, by kissing when the Lips are ulcerated, by hereditary Succession, and many other ways, besides that of perfect Enjoyment.

If it be inveterate or hereditary, or return after Salivation; if attended by the Scurvy, or obstructions of the Bowels, or troublesome Catarrhs; and if the Bones of the Head are corroded; it is not easily cur'd. Dry hot Constitutions are more in danger than those whose Bodies are moist and open. The forwardness and Suppuration of the Bubo's facilitates the Cure. If the Blood drawn forth become florid, and free of those livid blewish spots that use to appear in its surface, and withal be not over serous, 'tis a testimony of a perfect Cure.

The Cure of the French Pox, which consists in attenuating the viscid Humors, correcting and extinguishing the Acid, and evacuating both, is obtain'd either by sudorific Decoctions, or mercurial Salivations. The former are calculated for a recent Pox, and bilious, scorbutic, or melancholic Constitutions, to whom Mercury is so pernicious; and ought to be preceded by Purgatives. The most noted Sudorifick Ingredients are Guajacum and Sassaperilla. The Dose of the former ought to be inlarg'd for cold Constitutions; and that of the latter, for such as are hot. To these two I choose to add Juniper-wood.

The other Specifics are Burdock Roots, Soap-wort, Sassafras, Box-wood, Mastic wood, Oak-wood, Arsmart, *&c.* The common Vehicle for Sudorific Decoctions is Water; but when the Stomac is weak, we may add Wine towards the end of the Decoction. For emaciated Persons, some boyl 'em in Whey. When these Sudorifics are first us'd, we ought not to be too hasty in forcing the Patient to sweat; but to wait some days 'till the Humors are gradually prepar'd, and the Body incline to it. Besides, if they happen to operate more by Urine, than by Stool, tis not proper to recall the Humors that move that way; nay, on the contrary, we ought to add Diuretics, and endeavour to discharge the virulent matter by the passage to which Nature directs. When the Hu-

mors are ſufficiently prepar'd and diſpos'd for ſweating, the Patient may be moderately cover'd up, and the Vertue of the Sudorific promoted by drinking warm Broth (the Decoction it ſelf being alſo drunk warm) or kindling Spirit of Wine; and while he continues thus to ſweat daily, let a Purge be exhibited every ſeventh day.

Take of the ſhavings of Guajacum, ſix ounce; the rinds of Guajacum, two ounce; Saſſaperilla Roots, two ounces; ſhavings of Saſſafras, an ounce; quick Silver purifi'd by the addition of an Alcali, and Antimony in coarſe Powder, both ty'd in a bag, of each a pound. Macerate them in common Water for forty eight hours; then boyl them till two thirds be evaporated. Some add Soap-wort, Hyſſop, Speedwell, Liquorice Roots, Raiſins, Burdock Roots, Fennel Seeds, *&c.* The Doſe of ſuch a Decoction is from four to eight ounces, according to the Circumſtances of the Patient: To be taken only in the morning for two or three days without ſweating. But after theſe preparatory days are over, let the Patient be put into a dry or wet Bagnio, according as his Conſtitution is moiſt or dry, about an hour after taking a Doſe. And after an hours ſweating, let him retire to a Bed, where the ſweat may finiſh its progreſs of its own accord. But in the mean while the ſweat muſt be carefully rub'd off, and the Sheets or Cloaths ſhifted after ſweating, and well waſh'd and air'd before they be us'd again. This method muſt be perſiſted in for four or ſix Weeks, till all the Symptoms diſappear, and the Diſeaſe be totally rooted out. In the Interim let the Diet be thin and dry. A ſecond Decoction of the ſame Ingredients may be given for ordinary drinking; and Raiſins, or ſome ſuch light thing, for Supper.

If the Diſeaſe be inveterate, it will be needful to raiſe a Salivation by the uſe of Mercury; ſince ſudorific Decoctions cannot of themſelves reach the Cure, tho' they may ſtill be uſeful during the progreſs of the Salivation, for attenuating and preparing the Humors: But they muſt be ſo order'd, that they do not procure ſweat. The beſt preparation of Mercury for internal uſe, in order to ſalivate, is the red Precipitate from Quick-ſilver diſſolv'd in the Spirit of Nitre and Allum, given to four grains, and repeated twice or thrice. Sweet Mercury is rather a Laxative, unleſs it be fix'd by frequent Sublimation, and mix'd with Yelks of Eggs. But the moſt effectual way of procuring a Salivation, is that of inunction with mercurial Oints. As,

℞ Take

Take of Quick-silver purify'd, six ounces: Hogs Fat, not salted, a pound. Mix them exactly, and add of the Gelly of Ox Feet, half an ounce; Turpentine, three ounces; distill'd Oyl of Turpentine, an ounce, make an Ointment. With which annoint the soles of the Feet, palms of the Hands, Wrists, Ancles, Elbows, Knees, and Backbone, from the Shoulders down to the Os sacrum, twice a day for three successive days. Two ounces of the Ointment will suffice for each inunction, and about the fourth day if the Salivation advance one inunction more will serve. If it do not, we must continue to anoint; and if all prove ineffectual, we ought to observe nicely where the Impediment lies. If the Stagnation and Viscidity of the Humors about the Breast retard the work, let a Vomit be exhibited; if want of Strength and Spirits, let the Sudorific Decoctions be Administred. The Salivation being obtain'd must be continued till the Saliva become fœtid and viscous, and apt to fall to the bottom in a Vessel full of Water, or stick to its sides. If the Salivation exceed its due bounds, let Opiates, Clysters, and Purgatives be us'd, as also Gold both held in the Mouth, and given inwardly.

After the Salivation is over it will be requisite to shift the Bed-cloaths and wearing Cloaths, and to continue the use of the Decoctions of Woods; Which if the Salivation was imperfect may recal the Nocturnal Pains, by driving the remaining Acid, dissolv'd by the Mercury, into the external Parts: But their continu'd use, with that of Mercury, will overcome 'em. Purgation is also proper after the Salivation.

Before the Commencement of the Cure, as well by a Salivation as by Sweating, 'twill not be amiss to cleanse the first passages by Vomits and Purges, that so the humors may be more pliable, and the troublesome Symptoms of the Breast prevented. If the Pox be inverate, or if the virulent Matter be fix'd in the external Parts, one or two Purges will suffice; since we ought to be cautious of recalling the humors to the Center, When the Matter is joyned to the fluid juices, repeated Purgation is of use. For which end, Coloquintida and sweet Mercury are the topping Ingredients. As,

Take of the extract of black Hellebor, and sweet Mercury, of each, fifteen grains; Scammony Sulphurate, and extract of Troches Alhandal, of each two grains. With Essence of Fumitory or that of Woods; make Pills.

Take

Take of the Conſerve of Fumitory, a dram; Roſin of Jalap, Sulphurate Scammony, of each ſix grains; Turbith Mineral four grains. Make a Bolus.

Some add Purgatives to the Sudorific Woods; as likewiſe volatil Salts, urinous Spirits, and Cinnabar of Antimony, together with the extracts and diſtill'd Oyls of Woods. As,

Take of the ſhavings of Guajacum, four ſcruples; Diaphoretic Sulphur of Antimony, a ſcruple; volatil Salt of Vipers, twelve grains. Make a Powder for two Doſes. Or,

Take of *Matthiolus* his Quinteſſence, half an ounce; Spirit of Venice Treacle, a dram; Clyſſus of Antimony, half a dram, Spirit of Guajacum, two drams. Mix for a Doſe, to be pour'd into each draught of the Sudorific Decection.

Before we take leave of this Subject, it will be requiſite to conſider the Symptoms, and point to their particular Cures. The firſt that offers it ſelf, is the Clap, or virulent running of the Reins. This Symptom appears frequently by it ſelf without the Pox, but if it be not ſpeedily cur'd degenerates into it. The cauſe of it is ſome ſharp Miaſma's proceeding from Ulcers in the Womb, which in the time of Coition inſinute themſelves thro' the Urethra and inlarged Pores of the Yard, into the Proſtatæ, and by fermenting corrupt their watery juice, which in time becomes corroſive, Ulcerates the Glandules, and Excoriates the Urethra and Prepuce. Hence the Symptoms of a Clap are, a violent pain about the Root of the Yard, where theſe Glandules are ſeated; a continual Efflux of diſcolour'd matter, as being firſt yellow, then green and blue; the Inflammation and oft-times Ulceration of the Nut of the Yard, the Corroſion of the Urethra, follow'd by Caruncles, an inſufferable Heat of Urine, and a ſqueezing pain girding the Yard, eſpacially in the Night-time, or when it attempts Erection. If a Clap continue long it Excoriates and waſts the Glandules, and ſometimes the malign ferment reaches the Stones, and cauſes their Swellings and Bubo's.

The firſt ſtep towards the Cure, is to cleanſe the Body by purging with Coloquintida, the extract of black Hellebor and ſweet Mercury, or rather the green precipitate prepar'd with Quick-lime; which tho' it may ſeem at firſt to exaſperate the Symptoms, yet it lays the Foundation of the Cure. After Evacuation we proceed to balmy, cleanſing and healing

ing Ingredients, in regard of the Ulcer of the *Prostrata*. Such are the distill'd Oyl of Turpentine, the Turpentine Balsam of Sulphur, joyn'd to *Quercetanus*'s Clap Water, the juice of Lemons mix'd with Spirit of Turpentine and Camphyr, the Balsam prepar'd of Sugar of Lead and Oyl of Turpentine, Oyl of Juniper, Extract of Tormentil, Rosin of Guajacum prepar'd with Tincture of Tartar, the Decoction of Quick-silver in Water, the Balsam of *Peru*, and above all that call'd Capaivi, or its Essence prepar'd with Tartaris'd Spirit of Wine. Some commend the infusion of Cantharides in Wine. To these we may add the bone of a Cuttle, Diaphoretic Antimony, Chalybeat Bezoar, and whatever subdues a prevailing Acid. If the Infection have already reach'd the Blood, it will be needful to administer Decoctions of Woods, and the above mention'd Sudorifics, mix'd with the Essences of Woods, and Tincture of Coral.

Take of Turbith mineral, six or eight grains; with Conserve of Roses make a Bolus.

Take of Extractum Catholicum, fifteen grains; the green precipitate Mercury, six grains; Extract of Troches Alhandal, two grains; with the Essence of Woods, or distill'd Oyl of Amber, make Pills.

Take of the Extract of Tormentil, an ounce; Sugar of Lead, half an ounce; Camphyr, two drams. With distill'd Oyl of Turpentine make Pills.

Take of the Balsam of Sulphur, prepar'd with Oyl of Turpentine, two drams; Balsam of Capaivi, a dram. Mix Dose fifteen drops, twice a day.

Externally for cleansing the Ulcers, we inject Quick-lime Water, in which Aloe, Myrrh, Hony of Roses, Sugar of Lead, and sweet Mercury are dissolv'd. If the Ulcers tend to a Cancer, we add Unguentum Ægyptiacum; or if an Ulcer appear in the Nut of the Yard, we wash it with a solution of sublimate Mercury in the same Water. If the Testicles are inflamed, we apply Cataplasms of the Meal of Beans and Cumminseeds boyl'd in Vinegar and Water, and mix'd with Litharge; or anoint 'em with a Liniment of the Balsam of Sulphur, Oyl of Cummin, and Ointment of Marsh-mallows; and if any hardness remain, discuss it with a Plaister of Gum Ammoniac, and the Plaister of Hemlock. The Plaister de Ranis with Mercury is of excellent use for other places; but for the Testicles 'tis not so proper, for fear the Mercury should extinguish their ferment. If the Prepuce be inflam'd, foment it with the

phlegm

Phlegm of Vitriol, or Diſſolution of Sugar of Lead in Lime Water.

A Clap in Women is cur'd after the ſame manner, and attended by Symptoms of the ſame Nature.

The next Symptom we take notice of, is that of Bubo's or Glandulous ſwellings, occaſion'd by the Stagnation of viſcid Lymph. Their Suppuration ought to be promoted by applying *Sala*'s Magnetic plaiſter, or Toads ſoak'd in Vinegar, or the plaiſter de Ranis with Mercury, ſoften'd with Oyl of Guajacum or fœtid Oyl of Tartar, or the plaiſter of Hemlock, mix'd with Soap. When the Bubo's are ſufficiently ſoften'd, let 'em be open'd, with a Cauſtic, or a Launce, and kept long open by applying the Balſam of St. *John*'s wort, with Oyl of Tartar, and the plaiſter Opodeldoch. If either the Suppuration or Cleanſing advance but ſlowly, Cupping glaſſes are of uſe, for attenuating the ſtubborn Matter. But after all, if there be any ground for ſuſpecting a Cancer, we muſt lay aſide the thoughts of Suppuration, and indeavour the Cure internally, by adminiſtring firſt the Decoction of Guajacum, then Purgatives, and in the laſt place the Spirit and Salt of Vipers: And if theſe prove ineffectual, by the univerſal Method for the Pox.

As for the puſhes and pimples that attend the Pox, 'tis convenient to waſh 'em, with the Decoction of Woods, and Oyl of Tartar; and touch 'em gently with ſome Spirit impregnated with the Tincture of Copper, or with the following mixture. Take of Plantane Water, ſix ounces; Sublimate Mercury, four ſcruples; Allum, half an ounce. Mix and apply with a Feather. This mixture is alſo proper for the Swellings of the fundament; unleſs they be very large, in which caſe we root 'em out with Ligatures, or with a knife, and apply the mixture to the remains. Warts are remov'd by applying Oyl of Vitriol or Aqua Fortis.

The Ulcers uſually diſappear after Salivation. Otherwiſe they are cleans'd by applying the Solution of Sublimate Mercury in Plantane Water, or an Ointment of common Oyl, Ceruſs, Red Lead, Sublimate Mercury and white Wax. After they are ſufficiently cleans'd, which the laudable colour of the Pus and ſides of the Wound will diſcover, we apply the Decoction of Woods and Vulnerary Plants, with Sugar of Lead and Lime Water, and the plaiſter Diaſulphuris with that of Norinberg. The external Ulcers of the Yard are treated after the ſame manner. If they are internal,

nal, we inject the above-mentioned Liquors, or put in a Wax Candle cover'd with the foregoing Ointment. For those of the Womb, the same method will suffice. As for Ulcers of the Mouth and Palate, we must take care that the Caustic when applied be not swallowed down; if they are seated in the upper side of the Palate, we inject the healing Decoctions thro the Nose. Such are the Decoctions of Plantane, Self heal, Scabious, of each a handful; red Roses, two little handfuls; Sassaperilla, an ounce; Guajacum and red Sanders, of each six drams; Sumac, half an ounce. To two pound and a half of the strain'd Liquor, we add two ounces of the Syrup of dry Roses, and as much of that of Mulberries. The Ulcers of the Nose ought to be first wash'd with emollient Decoctions and Oyls, by reason of their crust; and then with the Astringent Vulnerary Decoctions, mix'd with Allum and Lime Water.

The Chops of the Hands and Feet are wash'd with the Decoction of Woods, sweet Mercury, and Quick-lime; to which if the Chops be hard, we add emollient Ingredients; after washing we anoint 'em with Sublimate or sweet Mercury, and the Oyl of Tartar, incorporated with Unguentum Enulatum.

If the Bones be rotten, we scrape 'em with a knife, or, if that method prove successless, we apply a hot Iron, and then wash 'em with Spirit of Wine. The Bones of the Palate must be cover'd with a plate of Silver or Gold. For pains in the Bones remaining after the general Cure, we apply the following plaister. Take of *Vigo*'s plaister, with a quadruple quantity of Mercury, an ounce and a half; Express'd Oyl of Nutmegs, and Opium dissolv'd in Vinegar, of each half an ounce; thicken'd juice of Tobacco, and common Cinnabar, of each an ounce; Saffron, six drams. With Turpentine make a plaister. If a swelling remain after the pains are over, apply clouts dip'd in fresh Butter boyl'd in Wine till it Evaporate.

The hard stony Concretions that frequently beset the Bones yield to a Salivation, interlac'd with preparations from Vipers and Antimony. Externally we apply in such cases, *Vigo*'s plaister, with a quadruple quantity of Mercury, softened with the distill'd Oyl of Guajacum, or the following Compostion. Take of Diachylon, with Gums, and Oyl of Olives, of each four ounces; new Wax, an ounce; black Pepper, half an ounce; common Salt, two drams; Spanish Flies, a dram; Mustard-seed, a scruple; thickened Hony,

two

two ſcruples. Make a plaiſter to be applied, above a piece of very fine Linnen, and ty'd faſt to the part, the Linnen underneath being chang'd twice a day. If theſe hard ſwellings are very painful, apply a Liniment of the Oyl of Turpentine, diſtill'd Oyl of Guajacum, Quick-ſilver and Opium: Some apply a plate of Lead cover'd with Mercury; or a plate of malleable Mercury prepar'd thus. Take of Lead a pound, and melt it; while 'tis yet liquid, put a bar of Iron into it till it begin to thicken. Then ſhift the Iron, and put an ounce of Quick-ſilver into its place, where 'twill congeal. After 'tis thus congeal'd, ſeparate it with a Knife, and boil it thrice in a pound of Oyl, 'till the Oyl be ſet on fire every time.

If this method prove ineffectual, apply bliſtering-plaiſters, and cut Iſſues above the part, or open the Tumor with an actual Cauſtic, and keep it open for a long time.

The Scab and Tetter that ſometimes attend the Pox, are remov'd by touching 'em with the ſolution of ſublimate Mercury in Arſmart-Water; and applying the Oyl of Tartar *per deliquium*, with Hogs-fat.

The Head-aches are cur'd by applying *Vigo*'s plaiſter, with Mercury, Caſtor, and Laudanum Opiatum; or by trepanation, if the Venereal virulency be extinguiſh'd. The tingling in the Ears is cur'd by injecting the Infuſion of Guajacum, Caſtor and Mint in Aſſes Urine, or the following Eſſence.

Take of Saſſafras Wood and Lavender-Flowers, of each a Dram; Guajacum-bark and Caſtor, of each half a dram; Cloves a ſcruple; Spirit of Wine, three ounces. Digeſt for ſome days, and ſtrain the Eſſence for uſe.

ART. VI.

Of the Hypocondriac and Scorbutick Diſeaſes.

THere's a ſort of Cachexy that frequently reigns in our Northern Climates, whoſe Symptoms appearing moſtly in the Hypocondria, occaſion'd its being call'd the Hypocondriac Evil. When its Symptoms are very fierce and exalted, 'tis intituled the Scurvy; a Name given it by the *Saxons* in *North-Germany*, who are moſt liable to it. The better part of Authors upon this Subject, being amus'd with its Symp

Symptoms and Effects, have vainly fancy'd to eſtabliſh its original ſeat in ſeveral Bowels, that are only accidentally concern'd. For if they traced it to its ſtate of Infancy, and firſt beginning, they had pitch'd upon the Stomac for the place of its Nativity; and the Acid Viſcous Crudities that a faulty digeſtion occaſions, for its cauſes.

For our further ſatisfaction in this matter, we ſhall briefly run over its Symptoms: And if we find that they owe their being to an Acid Crudity in the Stomac, ſhall reckon that we've made our point good: In the firſt place, the Appetite is oft-times over-keen in Hypocondriac Perſons, their digeſtion being weak, and followed by Convulſive or Weighty pains in the Stomac, Belchings, Wind and Noiſe, eſpecial in the left ſide of the Belly, where the Colon is ſtraiten'd; they are always Coſtive, and Laxatives operate better in them than proper Purgatives: If an Artificial or Natural Vomiting happen, they throw up Acid Matter, which ſtupifies the Teeth, and corrodes a Copper Veſſel, ſo as to render it ruſty: After eating they are oft-times ſeiz'd with a gnawing pain in the Stomac, reaching along the back, from the lower part of the Neck of the Gullet, (which ſome miſcall Nephritic Pains) as alſo by ſudden fluſhings in the Face; wringing pains in the Guts, palpitations of the Heart, perturbation of Mind, and a difficulty of breathing, occaſion'd either by viſcous Crudities diſtending the Stomac, or Convulſions of the Middriff and Muſcles of the Breaſt, or Wind in the Abdomen hindering the deſcent of the Middriff. In proceſs of time, hard Tumors ſometimes infeſt the Intrails, and the Convulſive contractions of the Fibres of the Branches of the Arteria *Cæliaca* cauſe beatings about the Loins. While their Stomac is empty, they are apt to be giddy and dull; they're liable to Head-aches, loſs of Memory, Fear, Grief, aukward Dreams, and vain Imaginations. Their Pulſe is very inconſtant, and all their Symptoms liable to periodical Exaſperations. Frequently they are ſenſible (as it were) of Fumes riſing upward from the Belly, and the Paroxyſm reſembles a Hyſterical Fit. In the Paroxyſm the colour and conſiſtence of their Urine is inconſtant; but when 'tis over, returns to a natural order. Theſe are the Symptoms of Hypocondiac Perſons; but all of 'em are rarely to be ſeen in one Perſon. The moſt certain Symptoms that always attend, are Gripings and Wind in the Guts, a weak Stomac, Coſtiveneſs and perturbation of the Head.

The

two ſcruples. Make a plaiſter to be applied, above a piece of very fine Linnen, and ty'd faſt to the part, the Linnen underneath being chang'd twice a day. If theſe hard ſwellings are very painful, apply a Liniment of the Oyl of Turpentine, diſtill'd Oyl of Guajacum, Quick-ſilver and Opium: Some apply a plate of Lead cover'd with Mercury; or a plate of malleable Mercury prepar'd thus. Take of Lead a pound, and melt it; while 'tis yet liquid, put a bar of Iron into it till it begin to thicken. Then ſhift the Iron, and put an ounce of Quick-ſilver into its place, where 'twill congeal. After 'tis thus congeal'd, ſeparate it with a Knife, and boil it thrice in a pound of Oyl, 'till the Oyl be ſet on fire every time.

If this method prove ineffectual, apply bliſtering-plaiſters, and cut Iſſues above the part, or open the Tumor with an actual Cauſtic, and keep it open for a long time.

The Scab and Tetter that ſometimes attend the Pox, are remov'd by touching 'em with the ſolution of ſublimate Mercury in Arſmart-Water; and applying the Oyl of Tartar *per deliquium*, with Hogs-fat.

The Head-aches are cur'd by applying *Vigo*'s plaiſter, with Mercury, Caſtor, and Laudanum Opiatum; or by trepanation, if the Venereal virulency be extinguiſh'd. The tingling in the Ears is cur'd by injecting the Infuſion of Guajacum, Caſtor and Mint in Aſſes Urine, or the following Eſſence.

Take of Saſſafras Wood and Lavender-Flowers, of each a Dram; Guajacum-bark and Caſtor, of each half a dram; Cloves a ſcruple; Spirit of Wine, three ounces. Digeſt for ſome days, and ſtrain the Eſſence for uſe.

ART. VI.

Of the Hypocondriac and Scorbutick Diſeaſes.

THere's a ſort of Cachexy that frequently reigns in our Northern Climates, whoſe Symptoms appearing moſtly in the Hypocondria, occaſion'd its being call'd the Hypocondriac Evil. When its Symptoms are very fierce and exalted, 'tis intituled the Scurvy; a Name given it by the *Saxons* in *North-Germany*, who are moſt liable to it. The better part of Authors upon this Subject, being amus'd with its Symp

Symptoms and Effects, have vainly fancy'd to eſtabliſh its original ſeat in ſeveral Bowels, that are only accidentally concern'd. For if they traced it to its ſtate of Infancy, and firſt beginning, they had pitch'd upon the Stomac for the place of its Nativity; and the Acid Viſcous Crudities that a faulty digeſtion occaſions, for its cauſes.

For our further ſatisfaction in this matter, we ſhall briefly run over its Symptoms: And if we find that they owe their being to an Acid Crudity in the Stomac, ſhall reckon that we've made our point good: In the firſt place, the Appetite is oft-times over-keen in Hypocondriac Perſons, their digeſtion being weak, and followed by Convulſive or Weighty pains in the Stomac, Belchings, Wind and Noiſe, eſpecial in the left ſide of the Belly, where the Colon is ſtraiten'd; they are always Coſtive, and Laxatives operate better in them than proper Purgatives: If an Artificial or Natural Vomiting happen, they throw up Acid Matter, which ſtupifies the Teeth, and corrodes a Copper Veſſel, ſo as to render it ruſty: After eating they are oft-times ſeiz'd with a gnawing pain in the Stomac, reaching along the back, from the lower part of the Neck of the Gullet, (which ſome miſcall Nephritic Pains) as alſo by ſudden fluſhings in the Face; wringing pains in the Guts, palpitations of the Heart, perturbation of Mind, and a difficulty of breathing, occaſion'd either by viſcous Crudities diſtending the Stomac, or Convulſions of the Middriff and Muſcles of the Breaſt, or Wind in the Abdomen hindering the deſcent of the Middriff. In proceſs of time, hard Tumors ſometimes infeſt the Intrails, and the Convulſive contractions of the Fibres of the Branches of the Arteria *Cæliaca* cauſe beatings about the Loins. While their Stomac is empty, they are apt to be giddy and dull; they're liable to Head-aches, loſs of Memory, Fear, Grief, aukward Dreams, and vain Imaginations. Their Pulſe is very inconſtant, and all their Symptoms liable to periodical Exaſperations. Frequently they are ſenſible (as it were) of Fumes riſing upward from the Belly, and the Paroxyſm reſembles a Hyſterical Fit. In the Paroxyſm the colour and conſiſtence of their Urine is inconſtant; but when 'tis over, returns to a natural order. Theſe are the Symptoms of Hypocondiac Perſons; but all of 'em are rarely to be ſeen in one Perſon. The moſt certain Symptoms that always attend, are Gripings and Wind in the Guts, a weak Stomac, Coſtiveneſs and perturbation of the Head.

The

The Symptoms being thus premiſed, let us now enquire after their Cauſe. The firſt Cauſe is a vicious Acid in the Stomac, enlarging the Appetite, but unfit for digeſtion. Hence enſues an Acid Crudity in the firſt paſſages, which depraves the Craſis of the Blood, prevents the due ſeparation of volatil Spirits; upon which the Lymph becomes Acid, and the Bile inactive.

Theſe are the ſources of all the preceding Symptoms, ſince Wind, Noiſe, griping in the Guts, and coſtiveneſs, are the natural reſult of a viſcous Acid in the firſt paſſages; as fluſhings in the Face ariſe from its efferveſcence with the Bile. The Convulſions of the nervous Membranes in ſeveral parts of the Body, are the effect of its irritation; its Crudity impairs the due fermentation of the Blood, and cauſes a palpitation of the Heart, and difficulty of breathing; it depraves the Nutrious juice of the Bowels, which ſettles into hard Swellings, and occaſions a degeneracy and auſterity in the Spirits; hence Fear, Melancholy, irregular thoughts, and uncooth emotions enſue.

The remote cauſes that promote Crudities, are Acid Liquors, or ſalt Victuals, or ſuch as are dryed in ſmoak; ſince both partake of the Acid Spirit of Salt or Soot: Want of motion to promote digeſtion, and the ſpeedy aſſimilation of Coyle; nocturnal Study or Care exhauſting the Spirits, impoveriſhing the Blood, and rendring the Lymph Acid. So much for the Symptoms and Cauſes of the Hypocondriac Diſeaſe.

When this depravation, derived from Acid Crudities in the Stomac, is carried ſo high, that the Blood, Lymph, and all the juices of the Body are notably perverted, and the vicious Acid becomes volatil, malignant, and apt to multiply its influence by Contagion or Hereditary Succeſſion, it is ſtiled the Scurvy; and is generally attended by ſuch a numberleſs train of various Symptoms, that 'tis cuſtomary to charge it with every uncommon Symptom even of other Diſeaſes. The peculiar Qualities of this ſcorbutical Ferment, are theſe. 1. An aptneſs to attack the Glandules, and pervert their Lymph. 2. A mortal enmity to the nervous Syſteme; as appears by the following enumeration of its Symptoms.

Scorbutical Perſons are troubled with a wearineſs, weakneſs, ſenſe of weight, and a dull obſcure pain in the Limbs. Their Appetite is either too fierce, or quite dejected; their Gums are liable to Excreſcences, Swellings and Ulcers; and when rubbed, void either a ſaltiſh, bloody, or ſerous humor;

mour; their Teeth are loose and corroded; their Mouth stinks; their Spittle is very salt, and sometimes plainly Acid, especially in a Morning; they are oft-times molested with Nocturnal Sweats; and red, yellow or black Spots upon the Arms and Legs, sometimes as small as Flea-bites, sometimes as large as a Crown piece; and sometimes the Limbs are beset with rough scaly Swellings like Measles; their Skin oft-times itches, and when 'tis scratched, becomes red, or tends to a sordid Ulcer.

Their Urine is high colour'd, or precipitates a red sandy flesh-colour'd sediment, or leaves a red friable sand upon the sides and bottom of the Urinal; a fat crust or skin swims on the top, and if look'd upon side-ways, appears parti-colour'd like a Peacock's Tail; after the Urine is thrown out, the Urinal retains a blueish colour, which is not easily wash'd off.

They are infested with a difficulty of Breathing, and wandring pains gird the Loins and Back, and wring, nay, sometimes distend and harden the Belly; and are oft times follow'd by red Pimples in the Skin, which disappear suddenly. Sometimes they are seiz'd with nocturnal pains in their Limbs shifting from the Arms to the Feet, and *è contra*. After violent wringing pains, their external parts frequently become paralytic. Sometimes Convulsions and Hysterical Symptoms seize 'em. Sometimes settled fix'd pains invade the Head and Limbs, especially in the Night-time; and resemble those of the French Pox. Sometimes their Legs are infested by hard stony Concretions that are void of pain, unless they walk: The Stomac is frequently provok'd to vomiting; and their Intestines to bloody Stools, which are voided without Gripings, and after the other Excrements, and so are easily distinguish'd from the Bloody-flux or the Piles. They are also liable to frequent Fluxes of blue or greenish Blood from other parts of the Body; and to a St. *Anthony*'s Fire in their Legs, which if indiscreetly managed, becomes a Gangrene or a malign Ulcer. Their Pulse is unequal frequently very small, and oft-times intermits. When the Disease is inveterate, they're subject to Catarrhs, Defluxions, Excoriations, Ulcers and Consumptions.

From these premises we draw this Conclusion, that the immediate cause of the Scurvy is a volatil saline Acid, which irritates the Nerves and Membranes, sharpens the Lymph,

Debauches the innate Spirits of the parts, and perverts the equal temperature of the Blood. The remote cauſes are the Sea Air impregnated with ſaline Acid Vapors, Salt and viſcous Food, Lazineſs, Weakneſs of Digeſtion, Infection, a hereditery Conveyance, and the influence of Chronical Diſeaſes. *Charleton* diſtinguiſhes a hot Scurvy proceeding from a Sulphur and a fix'd Salt, from that which is cold, and ſprings from an Acid; as likewiſe *Willis* who refers the cauſe of hot and cold Scurvy's to the prevalency of Sulphur or Salt. But all theſe differrences proceed only from the various Conſtitutions of Patients, thwarting or promoting the efforts of the ſcorbutical cauſe.

A Scurvy frequently joyns it ſelf to other Diſtempers, inſomuch, that without a particular regard to it, they cannot be cur'd. The ſigns that argue for the preſence of it, are theſe,

1. The heat and tickling of the Gums, and effuſion of ſalt, watry, or ſtinking Blood.
2. A purple half Moon under the Eyes.
3. Little red ſpots like flea-bites on the Thighs and Legs.
4. The weakneſs of the Knees.
5. The ſtinking of the Mouth, eſpecially when the Stomac is empty.
6. Sudden and unaccountable Fluſhings all over the Body.
7. The flame colour of the Urine, without a Fever; or red friable Sand ſticking to the bottom or ſides of the Urinal.

If the Scurvy be recent it admits of a Cure. If inveterate, it requires a continued uſe of proper Medicines for a long time; and frequently terminates in fatal Dropſies, Cachexies, Obſtructions of the Bowels or Conſumptions. If a difficulty of breathiug attend it, 'tis very dangerous, and frequently finiſhes the Tragedy in a Swoon. Coſtiveneſs and ſuppreſſion of the Piles or wonted Evacuations are bad Omens. A weak and unequal Pulſe is leſs to be fear'd than in other Diſeaſes. Black Urine, without a Fever, is well look'd upon, as being a ſign of the ſolution of the Diſeaſe. Red ſpots are a good ſign. But black, livid, or blue ones and Ulcers are very bad. Night ſweats with florid eruptions, frequently give relief. The Symptoms of a Scurvy are oft-

oft-times mutually exchang'd: Thus wandring pains are shifted for a fixed Head-ach; the Cholic and Convulsions for a Palsie, or inconstant Swellings; grievous pains for a Lethargy, *&c.* A hot Scurvy, or such as proceeds from bad Diet, and has fix'd Symptoms; is not easily Cured. A Looseness attending a Scurvy is an unlucky Companion. Infine, all prognostics relating to a Scurvy are very uncertain; for sometimes dismal Symptoms disappear on a sudden, and meeker signs are surpriz'd by death.

The Cure of Hypocondriac and Scorbutical Diseases consists in correcting and evacuating the Crudities of the first Passages, fortifying the Stomac, retrieving the due Crasis of the Blood, and restoring all wonted Evacuations to their former course. In order to compass these ends, let the following Rules be heedfully minded.

1. Blood-letting and Issues are of no direct use. Sometimes indeed, indirectly, a scorbutical Catarrh may reap benefit from the latter; as the Head-ach and fixed pains in the Legs, may justifie the former.

2. Diuretics are always proper, and a plentiful evacuation of Urine was ever observ'd to give relief. In the beginning of the Disease gentle Diuretics are best, for fear of draining the Morbifical cause out of the first Passages into the Vessels. Such are the volatil and fix'd Alcali's, *viz.* Arcanum Duplicatum, Spirit of Earth-Worms, Tincture of Tartar, Spirit of Sal-armoniac, *&c.*

3. Dry Vomits given in large Doses, usher'd in by Digestives; and in case of Costiveness, proper Clysters; are the Basis of the Cure of the Hypocondriac Disease. In a form'd Scurrvy they are improper, as being apt to stir up and exasperate the sharp scorbutical Juices.

4. Purgatives waken the Symptoms of the Belly, and upon that account are justly avoided. But Laxatives are very useful.

5. Attenuating Gums and other such Ingredients, are always useful for cutting the viscous Humors that give being to the Hypocondriac Diseases.

6. The Belly ought to be always kept open.

7. When Aperients, by opening and unlocking the Obstructions of the Bowels, cause a Flux or Dysentery; let the Guts be corroborated by Elixir Proprietatis, Tincture of Coral, *&c.*

8. Chalybeats and dry Abſorbents are not always of equal uſe in the Hypocondriac Diſeaſe; for, if the Bowels are moleſted with hard Swellings, moiſt, liquid Aperients are preferable.

9. Antiſcorbutics are uſeful againſt the Hypocondriac Diſeaſe as well as againſt the Scurvy.

10. Bilious Conſtitutions, or ſuch as are rul'd by a volatil ſharp Alcali, are oft-times offended by volatil Antiſcorbutics, and oily Aromatics. Wherefore 'tis adviſable in that caſe, to qualifie the former with Spirit of Nitre or Whey; and ſhift the latter for meagre thin Salts, and Chalybeat Abſorbent Powders.

11. Vinegar is pernicious. But the Juices of Acid Fruits are allowable.

12. Volatil, ſharp Antiſcorbutics, ought always to be uſher'd in, and ſometimes interlac'd, with Chalybeat Powders, or Alcalin Salts.

13. When the ſcorbutical Acid is corrected, and the Stomac able to digeſt, Milk mixed with Spirit of Sal-armoniac, or that of Scurvy-graſs, is of excellent uſe; it tempers the Acid, qualifies the ſharp Salt, and bedews the nervous parts. For Hypocondriac Perſons 'tis not ſo proper as Whey.

14. Sweet Mercury is fitly mixed with Laxatives for Hypocondriacal Perſons; but 'tis pernicious to ſuch as are ſcorbutical, tho' Antimony be very uſeful.

Having premis'd theſe cautionary Rules, we proceed to the Method of Cure. In which, digeſtive Preparatives lead the van. Such are Cetrach, Hyſſop, leſſer Centory, Saſſafras, Myrrh, China-root, and the fixed Salts of Plants; Crabs-Eyes, Caſtor, Amber, Coral, Steel, and Abſorbent Chlaybeat Powders, excepting the Powders of Stones partaking of Steel, ſuch as Blood-ſtone, the Load-ſtone, *&c.* ſince the number of their Aſtringent earthy parts ſurmounts that of the Chalybeat, and joins with the Acid in the firſt Paſſages into a ſtyptic Body, cauſing Coſtiveneſs. From the above mentioned Ingredients, we draw ſeveral Preparations, ſuch as the Extract of Steel; the Tinctures of the Vitriol of Steel, of Tartar, and of the droſs of the Regulus of Antimony; the Hypocondriac digeſtive Salt, (*viz.* the *Caput mortuum* of the Spirit of Sal armoniac) Tartar vitriolated; the Terra Foliata of Tartar, (prepar'd by impregnating Salt of Tartar with Vinegar, then diſſolving it in Spirit of Wine, and drawing off the

the Spirit) *Poterius*'s Antihectic, Chalybeat Bezoar, Elixir Proprietatis prepared without an Acid, and especially Arcanum duplicatum. For example,

Take of Fennel and Mint-water, of each an ounce and a half; the solution of Steel, with the Juice of Apples, half an ounce; Magistery of Coral prepared with the Juice of Citrons, a dram; Syrup of Orange-peel, six drams. Mix, and exhibit two or three spoonfuls Morning and Evening, for correcting an Hypocondriac Acid.

Take of the aperient Crocus of Steel, half a dram; Arcanum duplicatum, a scruple; Salt of Wormwood, half a scruple. Make a Powder for three Doses.

Take of the aperitive Tincture of Steel, two drams; Spirit of Scurvy-grass, a dram; Spirit of Sal-armoniac, half a dram. Mix. Dose fifty drops.

After these preparatives are us'd for a Week or two 'twill be time to administer a Vomit of the Infusion of Crocus Metallorum, mixed with the Spirit of Scurvy-grass. Or thus,

Take of *Dornerellius*'s Anti-scorbutic Water, two ounces; Spirit of Scurvy-grass, half a dram; Emetic Tartar, three or four grains; Extract of Steel, half a scruple. Mix, *&c.*

Next in order are gentle Laxatives, especially in a hot Scurvy; such are the Pills of Ammoniac, or those of Tartar mixed with sweet Mercury, which is of excellent use against Costiveness: For Resinous Purgatives ought to be avoided, as being endowed with an astringent quality. Wherefore Aloes, whose Gummy part is of good use, ought always to be dissolved in a watry Vehicle, that so its Rosin may be separated. Sometimes we mix Laxatives with Specific Alteratives, and continue their use for some time. And whet 'em if there be occasion, with Coloquintida or Troches Alhandal. Raisins, Prunes, Tamarinds, and ripe sweet Apples, or their express'd Juice, are of great efficacy against Costiveness: But Sugar and other sweet things ought to be carefully avoided. Rhubarb or Cream of Tartar, sharpened with Powder of Jalap, are recommended to such as are of a juicy Constitution. As for the forms of Receipts, they are as follows,

Take of *Quercetanus*'s Pills, called Melanagogæ, a dram and a half; Extract of Senna Leaves, half a dram; Rosin of Jalap, a dram and six grains; Tartar vitriolated, thirteen grains; volatil Salt of Amber, a scruple; the Seeds of

Muſtard, Scurvygraſs and Garden Creſſes, of each half a dram. With ſome Antiſcorbutic Water, make Pills. This is the Compoſition of *Timæus* his Antiſcorbutic Pills, of which, a ſcruple or half a dram is a Doſe.

Take of the Pills of Hiera with Agaric, twelve grains; Gum Ammoniac, diſſolved in Vinegar, half a ſcruple; Scammony ſulphurated, two grains. With the Eſſence of Steel make Pills.

Take of *Quercetanus*'s Pills of Ammoniac, a ſcruple; ſweet Mercury, fifteen grains; Extract of Troches Alhandal, two grains; the diſtilled Oyl of Carraways, two drops. With the Eſſence of Gum Ammoniac make Pills. The Vitriol of Steel calcined white, and the Extract of Steel prepared with Juice of Apples may be added by turns. The Extract of black Hellebor is alſo a proper Baſis for Pills.

Take of the Aperitive Crocus of Steel, a ſcruple; Scammony ſulphurated, and Salt of Tartar, of each five grains. Make a Powder.

Take of the freſh Leaves of Scurvy-graſs, Garden Creſſes, and Roſemary, of each a handful; freſh Horſe Radiſh Roots, an ounce and a half; picked Senna Leaves, an ounce; choice Rhubarb, half an ounce; Crude black Hellebor, three drams; Juniper berries, ſix drams; Cinnamon and Galangal, of each a dram and a half; Salt of Tartar, three drams. Tye 'em in a bag to be infus'd in Wormwood Wine, of which let the Patient take a draught Morning and Evening.

Take of Wormwood, three handfuls; leſſer Centory, two handfuls; black Hellebor Roots, three ounces; Polypody of the Oak, an ounce and a half; Bark of the Aſh-tree and white Tartar, of each half an ounce; filings of Steel, three drams. Sprinkle 'em with nine drops of the dulcify'd Spirit of Nitre, and tye 'em in a bag to be infus'd in Wine.

Take of Corants, two ounces; bruiſe and boyl them in Water; adding while the Water is yet hot, pickt Senna Leaves, three drams; Violet Flowers, three little handfuls; Cream of Tartar, a dram. Let 'em ſtand for ſome time in a hot place, then ſtrain the Liquor for uſe.

Take of the Pulp of Corants, three ounces; Arcanum Duplicatum, a dram; purify'd Sal-armoniac, and the Powder called Diatrion Pipereon, of each two ſcruples. With the Syrup of Apples make an Electuary for nine or twelve Doſes.

After

After Purgatives we ſubjoin Emollient abſtergent Clyſters; eſpecially thoſe of Carminative Ingredients boyl'd in Childs Urine, againſt Hypocondriac pains in the Belly; thoſe of Milk and Turpentine, againſt Nephritic pains; and thoſe of Whey or rather of Milk injected every other day in a confirm'd Scurvy. As,

Take of Cows Milk nine ounces; Lenitive Electuary, an ounce; Electuary of Bey-berries, half an ounce. With the yelk of one Egg, make a Clyſter to be injected at Bed-time, and retain'd all Night. Some inject the Decoction of Elder Flowers and Henbane Leaves in Milk, againſt Scorbutical pains.

The Patient's Body being thus prepared we advance to Alteratives. Such are Steel and all fix'd Salts, or whatever ſubdues an Acid. To theſe we joyn either the Aperients, Diuretics and bitter Stomachical Aromatics, or the ſpirituous volatil Salts. Thus the filings of Steel, all its Aperitive Crocus's, the vitriol of Steel calcin'd, the ſolar Liquor of Steel, the natural Spaws conſiſting of Steel diſſolved in Sulphur, the Tincture of the vitriol of Steel, the ſolution of Steel prepared with the juice of ſweet Apples and mixed with the Spirit of Scurvy-graſs, Chalybeat Diaphoretic Antimony, Chalybeat Bezoar, the Bezoar ſtone, *&c.* Theſe, I ſay, are all of good uſe. But when the Bowels are ſtuffed or threatened with hard ſwellings they are improper. Beſides, while Spaw Waters are drunk, 'twill be requiſite to defend the Stomac by ſome Stomachical Ointment or Plaiſter.

Next to Steel are the bitter Plants, dedicated to the Stomac and Spleen; ſuch are Fumitory, leſſer Centory, Juniper-berries, Wormwood, Agrimony, Cuckow-pint, and Elecampane: Their Decoctions, Eſſences, and above all, their fix'd Salts, and the Salt taken from the *Caput Mortuum* of the Spirit of Sal-armoniac. *Mynſichtius*'s Arcanum Duplicatum is of excellent uſe, eſpecially when the Perſon is liable to fluſhings and ſudden Inflammations. Elixir Proprietatis prepared without an Acid, and mixed with the Spirit of Scurvy-graſs and that of Sal-armoniac is alſo proper. The volatil Salt and Spirit of Tartar; the Tincture of Tartar mixed with the Spirit of Sal-armoniac, and given to forty drops; the Carminative Spirit prepared from Tartar, Nitre, and Spirit of Wine; the Spirit diſtilled from a Mixture of Quick-lime, Spirit of Sal-armoniac and Spirit of Wine impreg-

nated with Aromatics; the Spirit of Sal-armoniac, mixed with Antiſcorbutic Spirits; and eſpecially the Liquor of the Terra Foliata of Tartar, mixed with Spirit of Sal-armoniac; are very much approv'd both in the Hypocondriac and Scorbutical Diſtemper, eſpecially when the Perſon is liable to heats and fluſhings, and apt to be offended by the Oily Aromatic Ingredients: In which caſe purify'd or Antimonial Nitre is alſo uſeful. Nay, ſome are very diffuſe in their Encomiums upon a mixture of Nitre, and the Powder Diacumini. The forms of Alterative Recipe's are ſuch as theſe following,

Take of the Conſerve of Fumitory, an ounce and a half; Confection Alchermes, a dram and a half; Crude Steel pulveris'd, three drams; Magiſtery of Coral prepar'd with the Juice of Citrons, a dram. With the Syrup of Apples, make an Electuary.

Take of the Eſſence of Gum Ammoniac, half an ounce; Spirit of Sal-armoniac mixed with Oyl of Saſſafras, two drams. Doſe fifty drops.

Take of Elixir Proprietatis, prepared without an Acid, half an ounce; Spirit of Sal-armoniac mixed with Oyl of Cloves, two drams; Spirit of Scurvy-graſs, a dram and a half. Doſe forty drops thrice a day.

Take of Fumitory Water, two ounces; Borrage and Bugloſs Waters, of each an ounce; Carminative Spirit *de tribus*, two drams; prepared red Coral, a dram; Syrup of red Poppies, half an ounce. Mix and exhibit a ſpoonful now and then in the Hypocondriacal Fit.

The Specifics that are peculiarly devoted to the Scurvy, are of two ſorts: Namely, 1. The volatil ſharp Ingredients that amend the indiſpoſition of the Blood. 2. Balmy, Oily Medicines that repair the loſſes of the ſolid and nervous parts. Of the firſt ſort are Scurvy-graſs, Marſh Trefoil, Water Creſſes, Celandine, Pile-wort, the Herb call'd Trinity, Arſmart eſpecially its diſtilled Water, Horſe Radiſhes, Muſtard-ſeeds, and thoſe of Garden Creſſes, Rockets, Scurvy-graſs, and Columbines. To theſe we add the juices of Sorrel, Citrons, Oranges and ſuch like Acids, to temper the volatil ſharpneſs that frequently offends young hot Conſtitutions. Of the latter ſort are the Buds and Bark of the Pine or Fir Tree, the Pine Apple, or Pine Wood, Saſſafras, Guajacum, China-Roots, Juniper Wood, Winter Cinnamon; the Rinds of the Aſh-tree, Tamarisk, Citrons and Oranges; Wa-

ter

ter Germander, Fumitory, Wormwood, Elecampane, Zedoary, Galangal, Angelica, Lovage, the Fruit of the Knotberry-bush and its Electuary, Cacoa Nuts; the flowers of Broom, St. *John*'s wort, Elder and Saffron; Earth-worms, and Goose dung given to a dram in Wine.

The Antiscorbutics of the former sort being volatil, won't admit of Decoction. Upon which account we choose to infuse 'em in Wine for cold, in Whey for bilious, and in Milk for dry wither'd Constitutions. As,

Take of fresh Scurvy-grass, Fumitory and Water Cresses of each a handful; Horse Radish Roots, three ounces; fresh Elecampane Roots, an ounce; Corants, six drams. Cut, bruise, and tye them in a bag, to be infus'd in Wine, Whey, or Milk, of which exhibit a draught thrice a day. If they be infus'd in Wine, 'twill be proper to add half a dram of Crabs-eyes to every draught, for preventing the bad effects of the acidity that prevails in Wine.

Take of fresh Scurvy-grass and Water Cresses, of each a handful; Elecampane Roots, an ounce and a half; Acorus Roots, an ounce; shavings of Sassafras, and filings of Steel, of each two ounces; Orange-peel, Citron-peel, and Galangal, of each two drams. Tye 'em in a bag as above. If we desire to render 'em Purgative, we add Senna Leaves, black Hellebor, Rhubarb, and Salt of Tartar.

Take of the Juices of Scurvy-grass, Water Cresses, and Fumitory, of each three ounces; Citrons and Wood-sorrel, of each two ounces; clarify'd Goats Whey, three pound. Let 'em stand till they become clear, then strain the Liquor, and give five ounces for a Dose twice a day, adding to every draught a convenient quantity of the Essence of Steel, prepar'd with the Juice of Apples.

Take of the Chalybeat Cachectic Powder, two drams; Cuckow-pint Roots, and Arcanum Duplicatum, of each a dram; distill'd Oyl of Scurvy-grass, eight drops. Make a Powder.

From the above-mentioned Simples we draw Spirits. First by Fermentation, then by frequent Cohobation upon fresh Ingredients. These Spirits digested with the Extract of Steel, or with the Extract and thickened Juice of the other Ingredients, yield noble Antiscorbutic Essences, that are given from half a dram to a dram. To these we frequently joyn the distilled Oyls of the same Plants, and the volatil Spirits of Animals, especially the Spirit Sal-Armoniac, and that of Earth-worms.

Of

Of the balmy Antiſcorbutics that are calculated for the diſorder of the Nerves and ſolid parts, Saſſafras, China-Roots, the wild Pine-tree, and the Pine-apple are the moſt noted. As,

Take of the Buds of the wild Pine-tree, two ounces; China-Roots ſliced, an ounce; infuſe 'em in two pounds of Ale, and boyl 'em till the half evaporate. Exhibit a draught of the ſtrain'd Liquor warm, Morning and Evening, in order to ſweat. Juniper-berries, Fir-tops and Raiſins, are alſo proper Antiſcorbutics.

The Extract of Juniper-berries, or the thickened Decoction of the Pine-apple, reduced to Eſſences with the Spirit of Scurvy-graſs, are admirable for this purpoſe, being given from forty to fifty drops. But withal we ought to take notice, that all Remedies prepar'd from the Pine-tree, are enrich'd with a plentiful volatil Oyl that dejects the Appetite, and if too long us'd cauſes Fevers, Puſhes, or cuticular Eruptions in young people.

But both the Indications of ſubduing the ſcorbutical Acid, and relieving the ſolid parts, are admirably well anſwer'd by a Milk diet. The time of exhibiting Milk, comes after the general Evacuations, and the uſe of Steel. Goats Milk is accounted the beſt, and for thoſe who are Feveriſh we chooſe Whey. If the Patient be of a lean dry Conſtitution, and if the Scorbutical Acid be fiery and ſharp, Milk alone is beſt: But otherwiſe we boyl Antiſcorbutical Ingredients in the Milk, or add their Juices and Spirits. As,

Take of Goats Whey a quart, and boyl it in a cloſe Veſſel with a handful of freſh Fumitory Leaves. Then ſtrain it, and add to every draught twenty drops of the Spirit of Scurvy-graſs, and a little Sugar to prevent its curdling. Thus let the Patient continue the uſe of it for ſome time, interlacing a laxative every fourth day, remembring always to walk after taking it, in order to promote Urine, and abſtain from Wine and acid Liquors. This method of infuſing or boyling Antiſcorbutics in Milk, ought to be follow'd during the Spring and Summer; but in the Autum Wine is the more proper Vehicle.

The general Cure of the Scurvy being thus diſpatched, it remains to account for its particular Symptoms. Theſe are,

I. The Laxity, Swelling, Bleeding, Ulceration, or Putrifaction of the Gums. For removing ſuch Inconveniencies, we uſe Gargariſms, Tinctures, Powders and Ointments.

The

The Gargarisms are made of the Juice of Sage and Scurvy-grass; or the Decoction of Sage and Scurvy-grass, in Milk, Whey or Wine. Or of Private-wood, Pine-tree tops, Cresses and Allum; in Milk, Whey or Wine. To which we add by turns, Snake-weed Roots, Tormentil, Birthwort, Myrrh, Lac, Spirit of Salt, *&c.* As,

Take of Sage-leaves, three handfuls; Scurvy-grass and Water Cresses, of each half a handful; Flowers of Mallows, two handfuls; Polypody Roots six drams. Boyl them in two pound of fair Water till the half be consum'd. Then strain the Liquor, and add of the Hony of Roses, an ounce and a half; burnt Allum, a dram; purify'd Nitre, three drams; seal'd Earth, and Florentine Lac, of each a dram. Mix for a Gargarism. If the Gums are putrefy'd, boyl lesser Centory, Plantane, Savin, Water Germander, Roses, Birthwort-Roots, and Mastic, in austere Wine; and add to a pound and a half of the strain'd Decoction, an ounce and a half of the Ointment Ægyptiacum, and a dram and a half of crude Allum.

Take of Plantane, Self-heal, and Rose-water, of each four Ounces; Tincture of Roses, Spirit of Scurvy-grass, of each two drams; Spirit of Salt, Spirit of Vitriol, of each a scruple. Mix and rub the Gums.

After Gargarising the Mouth, 'tis proper to rub the Gums with Tinctures, especially *Mynsichtius* his Tincture of Lac, which may be improved by adding Myrrh, and shifting the phlegm of Allum for that of Vitriol. The following Tincture is also very effectual, *viz.* Pour warm Water upon Quick-lime, and boyl it, then let it stand till it be clear, and strain it. Draw off this strain'd Lye till a Salt remain at bottom. Now take of this Salt three drams; of the Gum Lac, two drams; Cyprus Vitriol, six grains; Rosemary and Sage-waters, of each an ounce and a half. Mix, and dissolve with a gentle heat.

As for Powders; Take of Snake-weed, and Tormentil Roots, and the Rinds of Pomegranats, of each a dram; Bloodstone, Frankincense, burnt Allum, and Sal-armoniac, of each half a dram; make a Powder for rotten Gums. Or sprinkle it with the distilled Oyl of Cloves, and Spirit of Scurvy-grass. Note, all stony or tartarine things are pernicious to the Gums.

If the Mouth or Gums are beset with Ulcers, apply the following Liniment. Take of crude Allum, a dram and a half; Sage-leaves, three drams; Roots of Florentine Orris,

a dram

a dram and a half; Myrrh, half a dram. With Hony make a Liniment. *Borellus* recommends Allum, with the Oyl of Sulphur and Conſerve of Roſes. If the Ulcers are malignant and ſtinking, apply the Ointment of Columbines, with the Juice of Sage, and Spirit of Salt; or the Ointment Ægyptiacum diluted with Hony, or *Platerus*'s green Waters. Note, the Spirit of Vitriol always makes the Teeth black.

II. Scorbutical Tooth-aches are cur'd by applying the Decoction of Pine-tree Leaves with Spirit of Scurvy-graſs; or the Juices of leſſer Houſe leek and Scurvy-graſs, with the Decoction of Henbane, Roſemary, Rue, Plantane, Sage, Snake-weed and Fearn. If the pain reach the Temples and Face, foment 'em with the weaker Spirit of Scurvy-graſs, mixed with the Spirit of Earth-worms.

III. The ſpots on the skin ought to be promoted by exhibiting inwardly the volatil ſpecifics, mixed with abſorbent Powders, and the Tincture of Columbine Flowers, or Emulſions of its Seed, or the Antiſcorbutical Tincture of Coral. If the ſpots be red, we add Acid Juices; if blew or livid, Scurvy-graſs and volatil Ingredients. Externally if they diſorder the skin, and are apt to excoriate, apply, after ſweating, a Liniment of Muſtard-ſeeds mix'd with Vinegar; or, if that be too ſharp, with the Oyl of ſweet Almonds, and freſh Juice of Citrons. The Ointment of the Roots of Florentine Orris, and white Hellebor, mix'd with the Oyl of ſweet Almonds, is look'd upon by ſome as infallible for this purpoſe. If the skin itch, and be moleſted with little miliar Eruptions, exhibit the Decoction of Pine-tree buds; and let the Hands and Feet be lick'd by a Dog.

IV. The fixed pains in the Legs are removed by bleeding in the Arm; applying Bliſtering plaiſters near the affected part; exhibiting Sudorifics, eſpecially the Decoctions of Woods, and Pine-tree buds, the Eſſence of Saſſafras, Spirit of Scurvy-graſs, Spirit of Venice Treacle camphoris'd, and Spirit of Elder-berries mixed with the Eſſence of Opium and Laudanum Opiatum; and by fomenting the part with the Spirit of Juniper-berries camphoris'd, Spirit of Earth-worms, and Aqua Articularis; or by ſoaking it in Tanners Lye, mix'd with Man's Urine; or in hot fermenting Wine; or in the Decoction of Ants; the perſon being put to a warm Bed immediately after. Some recommend the Decoction of Sage, Chamomil and Elder-flowers, Water Creſſes, and Henbane Leaves, in Milk or Whey for a fomentation; or the

Rob

Rob of Juniper, mixed with the thicken'd Juices of Water Cresses, Chamomil and Elder Flowers, in the form of a Cataplasm; or hot dry bags of Millet-seeds, Salt, Bran, Wormwood-tops, and Chamomil Flowers; to be applied to the parts; however, if all prove ineffectual, we must have recourse to the natural hot Baths, or artificial ones of Sulphur and Quick-lime.

V. The Cholic pains, or those resembling the Nephritic, as proceeding from the Cramp and Convulsion of the Guts and the Mesentery (which is seated in the Loins) are cured by cleansing the Intestines, and appeasing the tumultuous motions. The first design is compass'd by Raisins, Goats-Whey, Oyl of sweet Almonds, and the Decoction of Marsh-mallows. Proper purgatives are very pernicious. But if the pain be recent, and not very violent, we may venture to exhibit a gentle purge, mix'd with Opium, the Body being first prepar'd by Digestives. If the irritating matter be hot and sharp, Whey, in which China-Roots, Borrage-Flowers, and Clove-Gilliflowers are boil'd, the Emulsions of cold Seeds, Sugar of Lead, or the Antiphthisical Tincture, and earthy absorbent Powders are proper; but if the Urine be laden with a sandy Tartar, all Lenitives are in vain till that be remov'd by meek Diuretics, such as Turpentine, the Syrup of Marsh-mallows, *&c.* In other cases we exhibit the volatil oily Salts, mix'd with Opiates, especially the Spirit of Nitre dulcifi'd with the Spirit of Scurvy-grass, the Carminative Spirit *de tribus*, and the Spirit of Earth-worms. Or thus,

Take of *Dorncrellius* his Carminative Water, and the Antiscorbutic Water, of each two ounces; the Spirit of Scurvy-grass, and the Carminative Spirit *de tribus*, of each a dram; the Essence of Opium, half a dram; Syrup of Orange-peel, an ounce.

Emollient Anodyne Clysters, are also very proper; I mean such as are usually prescrib'd against Cholic and Nephritic pains, especially those of the Decoction of River-Crabs. But if they do not quickly give relief, 'tis advisable to set 'em aside, for fear of inflaming the Guts, and to foment the Belly with the Decoctions design'd for 'em. 'Tis also usual to anoint the Navel with the Oyl distill'd from Galbanum and Turpentine, and then apply either a hot Brick, or the plaister of Galbanum, mix'd with the Balsam of *Peru*. *Poterius*'s plaister Diasulphuris applied to the Loins, is of good use;

uſe; as alſo Fomentations, or Cataplaſms for the Belly, of Chamomil and Elder-flowers, Juniper-berries, Henbane-leaves, Creſſes, *&c.* boil'd in Milk. If the Clyſters prove ſucceſsful, let 'em be ſtill continu'd and ſharpen'd with purgative Ingredients; after the Paroxyſm, exhibit the Decoction of Pine-apples and Juniper-berries, and other Antiſcorbutics.

VI. The wandring Gouty pains that follow the Scurvy, are owing to the Convulſive influence of the Scorbutical Salt, upon the nervous parts, eſpecially the Membranes that cover the Bones. They are diſtinguiſh'd from a proper Gout, by theſe Symptoms. They are very inconſtant, and apt to ſhift the place of their Abode, and return again on a ſudden. Thus rubbing with a warm Cloth, will occaſion their removal and appearance in another part. They never riſe up in hard ſtubborn ſwellings. Their ſolution is frequently accompliſhed by Sweat and Urine; and by cuticular Eruptions, with an unſufferable itching. The Cure conſiſts in allaying the impetuoſity of the Spirits and Humors, evacuating the Scorbutic Salt by Sweat and Urine, and removing the radical cauſe after the Paroxyſm is over.

Firſt of all, it ought to commence by bleeding in the oppoſite ſide to the part affected; then Clyſters and Vomits, follow'd by abſorbent Powders and fix'd Salts, eſpecially Arcanum Duplicatum, Diaphoretic Antimony, and Cinnabar of Antimony; to which if the Spirits be very irregular, we add Narcotics. Oft-times a gentle laxative is very neceſſary. If the Spirits be low and flaggy, we may exhibit the Eſſence of Woods, or Venice Treacle, with Oſteocol mix'd with Opium. After theſe Preparations we proceed to the uſe of volatil Specifics, among which Worms lead the Van. The Spirit of putrifi'd Earth-worms, rectifi'd upon Cephalic Plants, or the Infuſion of bruis'd Worms, in Wine, Milk or Whey, are moſt effectual Medicaments. Some apply living Worms to the part, which die if the pain be violent, and as the Symptoms relent, prolong their life. Therefore this Application is renew'd till the Worms ceaſe to die. When the Paroxyſm declines, we endeavour to root out the radical cauſe, by preparations from the Pine-tree, China Roots and Juniper-berries mix'd with Antiſcorbutics. The Decoction of Wormwood and leſſer Centory; bags of Antiſcorbutical Ingredients infus'd in Wine; and the Carminative Spirit, or Spirit of Sal-armoniac, mix'd with the Spirit of Scurvy-graſs, are all of good uſe. In a word, if the Patient be of a moiſt Conſtitution,

ſtitution, and apt to ſweat, volatil Ingredients are beſt; if not, Milk, eſpecially Goats Milk, or Whey, in which ſoftning and Antiſcorbutical Ingredients are boyl'd, is preferable.

Take of Cinnabar of Antimony, a ſcruple; *Poterius*'s Diaphoretic Gold, twelve grains; Laudanum Opiatum, two grains. Make a Powder to be exhibited in the beginning of the Diſeaſe.

Take of the Water of Mother of Thyme, Pine-apples, and Scurvy-graſs, of each an ounce; the Eſſence againſt Catarrhs, three drams; the Spirit of putrifi'd Earth-worms, a dram; the volatil Salt of Hartſhorn, a ſcruple; the volatil Salt of Amber, half a ſcruple; prepar'd Crabs Eyes, half a dram: Laudanum Opiatum, three grains; Syrup of Elecampane Roots, an ounce. Mix, and give a ſpoonful, in order to ſweat.

Take of the buds of the wild Pine-tree, three ounces; China-Roots ſlic'd, an ounce and a half; Juniper-berries, an ounce. Boil them in Water; and exhibit four ounces in order to ſweat every Morning, and as much at Night without ſweating.

Externally we ought to avoid all oyly Applications. Let the part be forcibly rub'd with a Cloth outwards, or toward the Circumference; and fumigated with the ſteams of the Decoction of Earth-worms and Ants. Then apply Cataplaſms of Horſe-radiſh Roots, or Briony Roots, boyl'd with Chamomil Flowers, and Comfrey Roots in Milk; or of Cats dung and Earth-worms; or of Venice Soap, diſſolv'd in Spirit of Wine, ſprinkled with the Spirit of Earth-worms, and mix'd with Camphyr; but 'tis worthy our notice, that theſe Cataplaſms ought to be always kept warm, for if they grow cold upon the part, they wring and ſtraiten its Pores. Upon which account, ſome chooſe rather to foment it with the Spirit of putrifi'd Earth-worms, Spirit of Ants, the Spirit of Juniper-berries camphoris'd, or the Spirit of Wine impregnated with Aromatic Plants; and then apply a plaiſter of Tacamahac, and *Mynſichtius*'s Diaphoretic plaiſter.

VII. Scorbutical Head-aches are cur'd by volatil Sudorifics, ſuch as the volatil Salt of Amber, Spirit of Hartſhorn, the Cephalic Spirit of Vitriol, the Antiſcorbutical Elixir Proprietatis, and ſometimes Opiates. To theſe we ſubjoin a Milk Diet, which, tho' noxious in other Caſes, is of admirable efficacy in this.

VIII. A

VIII. A Scorbutical Palsie is, for the most part, usher'd in by a sence of a creeping sort of pain, like the motion of Emmets. 'Tis Cur'd thus; administer a Vomit, unless the person be liable to pains in the Belly. Avoid Bleeding, unless the person be Plethorick; inject emollient Clysters, and exhibit the mildest Laxatives. Then order the Decoction of Juniper and Pine-tree-wood, or the Pine-apple, with Rosemary and Cephalic plants, in Milk or Whey. The Decoctions of Sudorific Woods, the Essence of the Pine-apple, the Essence of Juniper-berries, the volatil Spirit of Tartar, or the Carminative Spirit *de tribus*, mix'd with the Spirit of Scurvy-grass; the volatil Salt of Amber, and especially *Poterius*'s Diaphoretic Gold, or fulminatory Gold, are all recommended upon this occasion. Externally the same Medicines are requir'd, as we order for the wandring Gout, especially the Spirit of Juniper-berries, Essence of Castor, Spirit of Earth-worms. Some order the person to be set up to the Waste in a heap of Grapes, while they ferment either naturally, or by the addition of Quicklime; Cataplasms of Briony and Comfrey Roots, are often us'd with good success; some fumigate the part with the steams of Goose-fat thrown upon burning Coals; and anoint it with the Oyl of Scurvy-grass, the Oyl or Spirit of Earth-worms, distill'd Oyl of Amber, and Balsam of *Peru*. Some apply plaisters, such as Oxycroceum and Nervinum Vigonis; but all Oily things are improper, by reason that they shut the Pores. Of the natural hot Baths, those of the meekest force and heat are best.

IX. Scorbutical Convulsions are cur'd by Vomits, Purges, and Antiscorbutics, mix'd with nervous Ingredients, Lac, Cinnabar of Antimony, the volatil Salt of Amber, and Camphyr, exbited in the Decoction of Elecampane and Juniper-berries, are of excellent use. Some recommend Castle-soap dissolv'd in Milk; as also the Essence of the Pine-apple, the Essence of Sassafras, Carminative Spirit and Spirit of Sal-armoniac mix'd with the Spirit of Scurvy-grass and Laudanum. In the last extremity, we must have recourse to the Decoctions of Sudorific Woods, China Roots, and Fennel. Externally, the Oyl distill'd from a mixture of Quicklime and Oyl of Lin-seed is of noted efficacy; and likewise all Cephalic Spirits and Oyls. Some recommend Bathing every day for eight hours, in the Decoctions of Gentian, Juniper-berries, Rue and Agrimony.

X. Asthma's attending the Scurvy, are cur'd by the Extract of Saffron; spirits of Hartshorn, Castor, Amber and Sal-

Sal-armoniac; Benzoin and Birth-wort Roots, with Antiscorbutical Decoctions. If the Asthma's are merely Convulsive, Laudanum Hystericum is a sovereign Remedy.

XI. Vomitings require Artificial Vomits, gentle Purges, and Stomachical Medicines, mix'd with absorbent Powders, and Antiscorbutics. Loosenesses are cur'd after the same method, rather than by Astringents, which frequently occasion Anxieties in the Breast, and Swoonings, Bleedings at Nose, or any other part, are best stopp'd by exhibiting inwardly Chalybeat Astringents, such as Chalybeat, Diaphoretic Antimony, Vitriol of Steel, the Antiphthisical Tincture, *&c.*

XII. A Scorbutical Consumption is generally accounted for by a Milk Diet, which is of excellent use, when it proceeds from the degeneracy of the Blood. But if the disorders of the Stomac and first Passages gave Birth to it, Milk is improper, and is fitly exchanged for Vomits and Stomachical Aromatics. In general, Elixir Proprietatis without an Acid, the Spirit of Sal-armoniac, the Antiphthisical Tincture, and Raisins eaten after Meals, are very proper. If the Animal Spirits are flat, nervous Remedies will be useful. If the Milky Vessels, or Glandules of the Mesentery and other parts are charg'd with Obstructions, volatil Aperients are necessary.

XIII. Scorbutical Fevers take their Original from the Corrosive sharpness of the Blood, and generally pass for Hectics. Their Symptoms are an excessive Appetite followed by Vomiting, or love for salt Victuals; Costiveness, Sweats smelling like Acids and leaving red sand in the Bed, and livid spots in the skin. They are cur'd by Antiscorbutics mix'd with Steel, and volatil and fix'd Salts, especially the Flowers and Spirit of Sal-armoniac, the Spirit of Sassafras, and Arcanum Duplicatum; Whey sharpen'd with the Juice of Citrons is much approv'd, as also Milk, mix'd with the Spirit of Sal-armoniac, when the Stomac is able to digest it, and the Feverish Paroxysm is over. The Symptom of Thirst is admirably well allay'd by exhibiting the Decoction of China-roots and Liquorice.

XIV. In Scorbutical Dropsies, strong Purgatives are noxious; gentle Diuretics mix'd with Antiscorbutics, being the Basis of the Cure. Such are the Infusion of Wood-lice in Wine, the Spirit of Sal-armoniac, and Tincture of Tartar, mixed with the Spirit of Scurvy-grass.

XV. St. *Anthony*'s fire happening to Scorbutical persons, is cur'd by taking inwardly absorbent Diaphoretic Powders,

mix'd with the Spirit or Syrup of Elder-flowers, and Spirit of Scurvy-grass; and applying outwardly the Decoction of Litharge, Elder-flowers, Olibanum, Myrrh and Mastic, in Lime-water and Vinegar, with a little Camphyr.

XVI. Ulcers accompanying the Scurvey, and threatning a Gangrene, ought to be wash'd with Lime-water, or the Decoction of lesser House-leek mix'd with the Spirit of Vitriol, and anointed with the Ointment of Tobacco and Sugar of Lead; or cover'd with the Powders of Myrrh, Frankincense, Crocus of Steel, and Sugar of Lead. Inwardly, let the Essence of Woods, Essence of Fumitory, and the Antiscorbutical Tincture of Coral be frequently administred. As for the hard Swellings that frequently molest the Legs; let Cataplasms of Briony and Comfrey Roots, and Chamomil Flowers, be applied to 'em. Or let the thicken'd Juices of Comfrey and Brook-lime, mix'd with *Mynsichtius* his Diaphoretic plaister and the distill'd Oyl of Chamomil, be us'd in like manner.

ART. VI.

Of breakings-out in the Skin.

UNder the head of deprav'd Nutrition, we allot an Article for Cuticular Eruptions; and first for the Scab, which proceeds from the depravation of the nutritive Juice of the parts under the Skin, occasioned by a preternatural Acid. This Acid takes its rise from sudden cold, succeeding to heat, and shutting up the steams of the Body within the straiten'd Pores; from the Contagion of an external Ferment, and sometimes, but very rarely, from internal Causes, such as the Scurvy, French-Pox, *&c.* But, for the most part, the Blood and internal parts are not at all tainted, it being only the nutritive Serum about the surface of the Body that is deprav'd; tho' 'tis true, that by continuance it may at last infect the Blood. If the nutritious Juice be very serous and apt to corrupt, the breakings out run much; if the Juice be Balmy, and impregnated with a volatil oyly Salt; they are crusty and dry.

As for the Cure of a Scab; we administer inwardly Purgatives and Sudorifics. The Purgatives are the Extract of black Hellebor, or Scammony Sulphurated, mix'd with sweet Mercury, and the purging Mercurius Vitæ, or Turbith Mineral

Mineral is an inveterate Case. If the Blood be tainted, we administer the Decoctions of bitter and scorbutical Plants, and Spices mix'd with purging Ingredients, in Wine, Whey, or Water, and continue their use for some time. The Sudorifics are the Docections of Woods, the Volatil Salt of Vipers, Hartshorn, Ivory; the fix'd Salts, the Sulphur and Cinnabar of Antimony, Diaphoretic Antimony, and the Syrup of Elder Flowers. As,

Take of Elder Flower Water, an ounce; the Spirit of Venice Treacle Camphoris'd, half a dram; Diaphoretic Antimony, fifteen grains; the volatil Salt of Vipers, half a scruple; Syrup of Orange-peel, half an ounce. Mix for a draught. Or,

Take of the Rob of Elder, a dram; the Powder of Snakes calcin'd, a scruple; Sal-armoniac, half a scruple. With the Syrup of Orange peel make a Bolus. The distill'd Oyl of Turpentine given to six drops every Morning; the Essence of Vipers to forty; the Tincture of Antimony, or Tincture of Coral, given to fifty drops, are also very proper. And when all proves ineffectual, a Mercurial Salivation may not be amiss.

Outwardly we apply Ointments of Sulphur, Mercury, especially that precipitated with the Spirit of Nitre, and Sugar of Lead; but we ought to take care that the Pores be kept open, for fear the scab should strike in. Upon which account, let Salt of Tartar be alway added. As,

Take of Unguentum Enulatum, and Album Caphoratum, of each half an ounce; Flowers of Bromstone, three drams; sweet Mercury, a dram; Salt of Tartar, or Oyl of Tartar *per deliquium*, a dram and a half, with the Oyl of Tobacco, or of St. *John*'s-wort. Make an Ointment; to which add of the Balsam of *Peru* half a scruple; Oyl of Rose-wood, six drops. Mix, and anoint the Limbs, especially the Joints at Night going to Bed; and in the Morning, wash off the Ointment with the Persons own Urine.

Take of the Decoction of Quick-lime, a pound and a half; sweet Mercury, three drams; Spirit of Venice Treacle Camphoris'd, an ounce. Mix, and wash the external parts, for taking off the scab, and the red scars that remain after it.

The distill'd water of Mans Ordure, is an admirable wash, and reserv'd by some as a secret. Some use Girdles of Quick-silver; others fumigate with Cinnabar; but the Body ought to be well cleans'd beforehand, and arm'd against

Cold. In a critical ſcab, we ought not to uſe repellents. But Baths of the Decoctions of the ſharp pointed Dock, Tobacco Leaves, Scabious, Elecampane and Briony Roots, Brimſtone, and Quick-lime are allowable. After ſweating by internal Sudorifics, the ſcabby perſon may bath in them, and rub down his Body, and after bathing anoint with the above-mention'd Ointment.

The itch is near ally'd to the ſcab, and proceeds from the ſharp Particles of the Serum, repairing to the ſurface in ſmall quantities; 'tis cur'd internally by purging and ſweating, as above; and externally by applying the following Ointment.

Take of the Roots of the ſharp pointed Dock, and Elecampane, of each an ounce. Boil them in Vinegar till they become ſoft; then beat 'em thro' a ſive, and add of the Oyl of Orris, three ounces; common Salt, an ounce; Myrrh, three drams; Litharge, an ounce and a half. With Wax make a Liniment.

A Leproſie proceeds from a ſaline corroſive Acid, reigning in the Serum; as being nothing elſe but a ſort of exalted Scurvy. It is oft-times the hereditary Infirmity of a Family, or follows a bad Diet, Chronical Diſeaſes, and the ſuppreſſion of wonted Evacuations. The ſigns which accompany it, are either internal or external. The internal are Acid or Muſty Belchings, Coſtiveneſs, Thirſt, a ſtinking Sweat, thick Urine, inſomuch that the Powder of Lead will ſwim upon it, an extreme propenſity to Venery; the thickneſs, viſcoſity, and unctuoſity of the Blood when drawn forth, and little clots of Sand ſticking to the Cloth, thro' which 'tis ſtrained; the frequency and weakneſs of the Pulſe, difficult reſpiration, ſtinking Breath, a wearineſs of the Limbs, Chillneſs, ſtupidity, and a hoarſe Voice, as if it came thro' the Noſe.

The External Symptoms are theſe. The Skin appears livid, black or yellow; it wrinkles, when expoſed to the cold; it is notably rough and Oyly, inſomuch that Water will not ſtick to it; it is covered with a Purple or white Dandriff; little moveable painleſs knots and ſwellings beſet the Forehead, Chin and Joints; a dry Ring-worm and Puſhes cover the whole Body; and affect not only the Skin, but the Muſcles; an eternal Itch, like the gnawing of Worms, or pricking with Needles, moleſts 'em; when they ſcratch any part, it turns dry and ſcaly, but voids no Matter; the hair of their Heads and Eye-brows falls off; their Forehead is furrow'd with wrinkles; their Ears ſtretched and ſwelled;

swelled, the Eye-brows callous and raised; their Eyes round, red, sparkling, infested with little hard swellings in the corners, and apt to water; the upper part of their Nose contracted, while the inferior is inlarg'd, troubled with frequent sneezing, and infested with a Polypus, and Cancrous corrosive Ulcers; the Face and Lips are pale, hard, livid and chop'd; their Tongue and Mouth liable to hard swellings, chops and corrosion; the Gums rough and swoln; the Spittle viscous; the Breasts hard, and their Veins swoln; the Joints withered and beset with callous indolent Ulcers that are apt to bleed upon the slightest touch; the Muscles of their Hands, especially those of the Thumb and first Finger, are much consumed; the Fingers and Toes benumed, the Joints distorted and knotty, and the Nails black, bowed and choped.

The Cure of a Leprosie is the same as that of a scab. If what was recommended upon that Head prove succesless, we must have recourse to the following Medicine, *viz.* Take four quarts of Lye, and a pound of white Arsenic. Boyl them for an hour or two, till the Lye be almost consumed; then add fresh Lye and boyl again till the Arsenic be dissolved. Then pour off the Liquor by inlination into a clean Vessel, and add two pound of Ceruss, dissolved in Vinegar, and filtrated. This will yield a precipitate which ought to be dulcify'd, and given for eight days together, from three to ten grains.

The Disease called by the *Arabians* Elephantiasis, does not spread so universally over the Body as a Leprosie; as being only a red, livid or black swelling in the Feet, attended by Ulcers in the Veins, that void a sharp clear Serum. It generally happens to old People that have drunk much Wine; and is frequently Critical. Upon which account we ought to be cautious of applying repulsing Medicines. Internally we administer Purges as in a Scab, and the Decoctions of Woods and Sudorific Ingredients for tempering the sharpness of the Serum. Externally we apply the Plaister of the Calaminar Stone, or *Meibomius*'s Plaister of the Oyl of Olives, Castle-soap, Ceruss, red Lead, and Camphyr. In the mean while we roll up the Legs from the Ancles to the Knees in a Swathe.

A Tetter and Ring-worm are near akin to a Scab, as being only a Crust, or hot Pushes on the Skin, causing heat, redness, itching, and roughness. They are cured by Purging, as in a Scab; and administring Sudorifics, with Sugar of Lead, or the Antiphthifical Tincture: In desperate cases, by

Issues

Iſſues or a Salivation. Externally we apply Caſtle-ſoap, mixed with Spirit of Wine, and Sugar of Lead, and in a word, the ſame things that were recommend for the Scab. In deſperate Caſes we uſe Lime-water, or the Ointment of Roſes, mix'd with ſublimate Mercury; or with Mercury precipitated with Spirit of Nitre.

The little hot Pimples called Phlyctenes, that frequently appear about the Wriſts and Fingers, are cur'd internally after the ſame manner as a Scab; externally by applying at firſt the Mucilages of Quinces and Linſeed extracted with the water of Frogs ſpawn, and afterwards Lime-water, and the Ointment of Litharge, or Diapompholygos, mixed with Vinegar of Lead. The leſſer Pimples, called Sudamina, are cured internally by Purging and Sweating, and externally by waſhin Milk or Lime-water mix'd with Camphyr, and ſhifting their Linnen often. The Puſhes that have little Worms in 'em, are cured internally by joyning the Eſſence of Myrrh, Elixir Proprietatis, Spirit of Hartſhorn, *&c.* to the abovementioned Purgatives and Sudorifics; and externally by waſhing in the Decoctions of bitter Plants, and applying plaiſters of their Juices mixed with Mercury; or picking out the Worms with a Needle.

The little hard callous ſwellings in the Face and Neck, called Vari, are for the moſt part red and whitiſh at the top. They ſeem to proceed from the depravation of the Genital Liquor, and moſtly attack ſuch as are ripe for Venery. The internal Cure is the ſame as above. Externally, we apply Cataplaſms of the Oyl of Bays, Ointment of Roſes, ſweet Mercury, and Oyl of Tartar; or a mixture of the Waters of Cows-dung, Elder-flowers, and Frogs-ſpawn, with the Oyl of Tartar *per deliquium*, Flowers of Sulphur, Borace, Ceruſs, Camphyr, *&c.* Some commend the precipitate from Lead, called Lac Virginis. Some recommend fumigation of the Face with Spirit of Wine ſpit out of the Perſon's Mouth upon a hot plate of Iron, and follow'd by a freſh fumigation of Myrrh thrown upon the ſame plate. This, they ſay, will alſo take off Wrinkles, and make old Women look young.

Freckles are little yellowiſh ſpots in the Face, Neck, Breaſt and Hands. The cauſe is the ſtagnation of the Serum between the Skin and Cuticle, occaſion'd by the heat of the Sun or otherwiſe. Internally, Elixir Proprietatis and Laxatives are proper. Externally, we waſh the parts with the Water of Cows-dung, or Bean-flowers, mixed with the whites of Eggs; or anoint it with a Liniment of Frankincenſe,

Ce-

Ceruſs, Myrrh, Brimſtone, Camphyr, and Hens Fat, applying afterwards Mans Fat to take off the roughneſs and ſcales that ſuch Liniments occaſion. The Oyls of Eggs, Tartar, Guajacum, Wax and Soap; the Powder of the Roots of Briony and Florentine Orris, ſweet Mercury, the Magiſtery of Lead, Lac Virginis, and the corroſive Liquor, called Liquor Mercurii Saccharatus, are alſo uſed by turns.

The little brown ſpots called Ephelides do generally appear upon big-belly'd Women; or thoſe whoſe terms are ſtop'd, as proceeding from the ſharpneſs of the Serum. For Cure we rub the part with a Citron, or ſower Apple cut up; and waſh it with the Emulſion of Hempſeed, or anoint with a Liniment of Bay-berries and Hony.

There are alſo ſpots of a ſad yellow colour, and about a hands breadth, called Maculæ Epaticæ, that ſuddenly appear and diſappear, and render the Skin rough and ſomewhat ſcaly. They proceed from the ſame Cauſe as Freckles. The internal Cure is accompliſhed by the Decoctions of bitter and Antiſcorbutical Plants mixed with Purgatives: The external, by the Coſmetics above mention'd; or in a difficult caſe by applying a Cataplaſm of Muſtard-ſeed beaten with Vinegar, Salt, and the yolks of Eggs.

The red Pimples and Wheals in the Face and Noſe, that moſtly follow hard drinking, proceed from the volatil Acid of Wine, incorporated with the Lymph corroding the Skin. Their internal Cure is compaſs'd by Bleeding, and exhibiting the Decoctions of bitter Herbs mix'd with Purgatives; and the adminiſtration of abſorbent Powders. Externally we apply the Sugar of Lead diſſolved, in diſtilled Vinegar, and mix'd with Camphyr, and Oyl of Roſes, or with the Juices of Houſe-leek and Plantane, or the Oyl of Tartar *per deliquium*, mix'd with Camphyr and the Waters of the Flowers of Beans, *Solomon*'s Seal, and Frog's-ſpawn; or an Ointment made of Pepper, Ginger, Brimſtone, and Unguentum Pomatum. In deſperate caſes we muſt have recourſe to Mercurial Compoſitions.

If the skin be diſcolour'd by the heat of the Sun, Puſhes, Pimples, or otherwiſe, its natural colour may be retrieved, by applying the Juice of Citrons, or Vinegar impregnated with the Flowers of Beans, *Solomon*'s Seal, Jaſmin and white Lilly Flowers. The Spirit of Wine Camphoris'd; the Eſſence of Benzoin mixed with fair Water, are alſo recommended. As alſo Powders made of dry'd Venice Soap, white Poppy-ſeeds, Starch, Lupins, Florentine Orris, Magiſtery

giſtery of Marcaſite, Moſch and Zivet; or of Briony and Cuckow-pint Roots, with Sugar of Lead and ſweet Mercury, which are mixed with the Waters of Figwort-roots, white Lillies, *Solomon's* Seal, Flowers of Beans, and Roſes, and ſo applyed in the form of a Cataplaſm. Some mightily covet the Oyl of Chalk as an admirable Coſmetic, but ſince 'tis not to be had genuine, the Oyl of Tartar *per deliquium* will ſupply its room, the Decoction of ſublimate Mercury in common Water, the Water being boyl'd till the Acrimony be quite extinguiſh'd, and then mix'd with Cerruſs, and after a freſh gentle boyling, clarify'd with the white of an Egg, that, I ſay, is a waſh of infinite uſe in Counterfeiting colours.

The Mange or Scurf that frequently beſets the heads of thoſe who are liable to the Scurvy, French-Pox, or Leproſie, ſeems to ariſe from an Acid. ingag'd in a viſcid Vehicle, that ſtagnates upon the out-parts, and ſhuts the Pores. It is cur'd internally as the Scab. Externally, let the head be frequently waſh'd with the Decoction of the Herbs, Southernwood, Betony, Celandin, Soapwort and Mallows; the Roots of Marſh-mallows, ſharp pointed Dock, and Burdock; Peaſe, Bay-berries and Coloquintida. Let theſe Ingredients be boyl'd in Lye, and reſerve the ſtrain'd Liquor as a waſh for the head.

Before we conclude this Chapter, 'twill not be improper to take notice of the ſhedding, or off-falling of the Hair, which is remedied by waſhing with the Decoction of Roſemary, Southernwood, Hony, Myrtle-Berries, Linſeed and Oyl of ſweet Almonds in Wine. The Ingredients being firſt infus'd for twenty four hours; and then boyl'd till the moiſture be conſum'd; and the remaining Juice expreſs'd for uſe. If the hairs are gray, we may endeavour to change their colour by combing with a Leaden Comb, wet with Aqua Fortis in which ſilver is diſſolv'd, it being qualified with common Water. Some commend the Ointment of Tobacco, ſharpen'd with Oyl of Bricks, for an univerſal Alopecia, and exhibit inwardly the Eſſence and Decoction of Woods with Chalybeats.

SECT.

SECT. XVIII.

Of Diseases hindring the regular Reflux of the Blood to the Heart.

THere are three Cases in which the regular Reflux of the Blood to the Heart is disturb'd. 1. In Inflammations, when the Blood stagnats in its Vessels. 2. In Empyema's, when the Blood is extravasated and lodg'd in some Cavity within the Body. 3. In *Hæmorrhagia's*, or external Bleedings.

CHAP. I.

Of Inflammations.

INflammations are occasion'd by the stagnation of the Blood in any part, *viz.* When the Quantity imported is larger than what returns by the Veins. The Symptoms attending 'em are, 1. A Redness. 2. A Heat. 3. A Swelling; and, 4. Pain, which is either accompany'd with a sense of the distention of the Fibres and nervous Parts; or a beating, as arising from the rebounding of the Blood, when disappointed of its passage; or a pricking, as caus'd by the sharp Salts, when strugling and tending to suppuration. Now that stagnating Blood is apt to produce those effects, is too plain to need a Proof. The remote Causes which promote this Stagnation, are either External or Internal. The former are; the occasional Compression, Contusion, or Distortion of the Vessels; Pains or the shrinking and contraction of the Nervous Fibres, and consequently of the Capillary Vessels, as in Arthritic Pains, and the Tooth-ach, or when a Thorn or Wasp stings the Part.

The internal Causes relate either to the general Disposition of the Blood; or the Infirmity of a particular Part. Those of the first sort are the thickness and viscidity of the Blood, or its being clotted by a prevailing Acid. Hence the Infusion of an acid Liquor into a Dog's Vein, redundancy of Blood, and the inconsiderat assumption of cold Liquors, or exposing one's self to the Cold after hot Exercises, are apt to produce Inflammations. Nay, the Blood of pleuritic Persons is visibly clotted when let forth, and all

the Medicines both internal and external, that are recommended for Inflammations, are such as dissolve or attenuat the thicken'd Blood, and drink in the Acid. The Causes relating to a particular Part that is frequently more liable to Inflammations than its other Companions, are the weakness of the innate Spirit of the Part; the Relaxation, Distention, or Disorder of its Fibres, and the hidden remains of an Acid; all owing to preceding Inflammations, especially if they degenerat into Ulcers.

If the Acid be very prevalent, the Humor hardens, and becomes a Schirrus, somewhat ally'd to a Cancer: If the Volatil Alkali and the Acid be more equally match'd they ferment together, and combine into a salin purulent Matter that discharges it self by an Ulcer. If the Stagnation be so great, that small quantities of Blood cannot pass, and the innate Spirit of the Part cannot correspond with the animal Spirits, the Blood corrupts and causes a Gangreen. If the Alcali of the Blood be more vigorous and powerful than the Acid, it unlocks the Blood and discusses the Inflammation. If an Inflammation happen in a temperat Season to young healthy People, and settle only in a fleshy Part, it is less dangerous than if it seiz'd a nervous Part, or attack'd cachectic old Persons. For the most part all Inflammations are acute, and accompanied with a Fever.

As for the Cure of Inflammations, Purging is pernicious. Perhaps upon the account of the Fever, a gentle Laxative may be allow'd. Or if the Belly be costive a Clyster of Whey and Hony may be injected. Bleeding is very proper especially in the beginning, as well by way of *Revulsion* in the opposit side to the part affected, as by way of *Aversion* in the same side at some distance, and by way of *Derivation* just by it. But we ought to be cautious of over-doing and weakening the Patient, or of being misled by the Practices of some in hotter Climats, which cannot be look'd upon as Precedents in ours.

What remains of the internal Cure is admirably well perform'd by administring volatil Sudorifics that unlock and attenuat the Blood, and absorbent Powders that imbibe the Acid. Of the former sort are the Spirits of *Sal Armoniac*, volatil Salt of Harts-horn, Venice Treacle, the Spirit of Venice Treacle camphoris'd, and especially the Spirit, Essence, Syrup, or Water of Elder-flowers; to all which we frequently add *Laudanum Opiatum*, especially if Unquietness thwart the design of Sweating. The Absorbents are Harts-horn, Ivory, Unicorns-

horn, Diaphoretic Antimony, Mineral Bezoar, and especially Crabs Eyes mix'd with Vinegar. Tho' Vinegar be an Acid, yet when joyn'd to Crabs Eyes, and absorbent Powders, it ferments and assumes a lixivious urinous Form, which is of admirable efficacy for dissolving clotted Blood. To these we ought always to add *Sperma Ceti*, and the Decoctions or Waters of vulnerary Plants, as being inrich'd with a plentiful Alcali. The dulcify'd Spirit of Nitre, and all the Preparations of Nitre, are also of excellent use, especially if the Fever be high.

As for external Applications, I refer the Reader to the sixth Book, and shall only now take notice of two Particulars. 1. The mistake of those who apply repelling Astringents, in order to straiten the Vessels and hinder the corruption of Blood. Whereas the Doctrine of Circulation teaches us that the Blood convey'd thither by the Arteries, cannot be beat back, or return any other way than by the Veins: Now to straiten the Vessels that are already straitned by the swelling, is the ready way to hinder the Bloods access to the Veins and augment the Inflammation. 2. If the Tumor cannot be discuss'd, we must bring it to a Head by ripening Applications; and, when the Ulcer is open, see it throughly cleans'd before we attempt to consolidat.

The general Cure of Inflammations being thus dispatch'd, we proceed to particular Inflammations.

ART. I.

Of a Quinsey, Thrush, and Falling of the Uvula or Palat of the Mouth.

THe Inflammation of the Muscles of the Neck, especially those of the Wind-pipe and Gullet, is stil'd a *Quinsey*; under which we comprehend all Inflammations relating to the Chops. If the *Internal* Muscles of the Throat or Head of the Gullet are inflam'd 'tis call'd *Synanche*; if the *External*, *Parasynanche*; if the *Internal* Muscles of the Head of the Wind-pipe, *Cynanche*; if the *External*, *Paracynanche*. If a Quinsey proceed from the simple Stagnation of pure Blood, 'tis accounted *Genuin*; if the Viscidity of the Lymph be the first Author of the Swelling, and so accompany or rather cause the Stagnation, 'tis a *spurious* or *white* Quinsey.

The Causes of a Quinsey are the unseasonable suppression of a Flux of Blood, malignant Miasma's in the Air irritating

the Throat and Wind-pipe, the aſſumption of corruſive Liquors, which provoke the Muſcles to Contractions; cold Air, Bones, Pieces of Glaſs, or whatever happens to diſturb the Repoſe of thoſe Parts, or thicken the Blood, or Lymph. The Viſcidity or Sharpneſs of the Lymph, has a peculiar tendency to the Inflammation of the *Tonſillæ* or Glandules in the Throat; which cauſes 'em to throw out large Quantities of glutinous Lymph upon the Tongue and Jaws.

An imminent Quinſey is uſher'd in by a difficulty of Breathing, Swallowing, and Moving the Neck; and a notable Heat in the Throat. The Symptoms that accompany it are a difficulty of Breathing, eſpecially in a *Cynanche*; the tumor, pain, and redneſs of the Neck and Tongue, a viſcous Film or Cruſt proceeding from the *Tonſillæ* and covering the Tongue, a difficulty of ſwallowing, eſpecially in a *Synanche*. A genuine Quinſey is alſo attended by an acute Fever, and a diſtending, Convulſive Pulſe, like that in a Peripneumonia; but a ſpurious one by a ſlow Fever and meeker Symptoms.

If this Inflammation be not quickly diſcuſs'd, it either choaks the Patient or becomes an Ulcer, which ſometimes diſtils a purulent Matter into the Lungs, and ſo occaſions tragical Symptoms. If the Swelling and Redneſs diſplay themſelves viſibly upon the external Muſcles, 'tis a good Circumſtance: But if the internal Swelling, and difficulty of Breathing increaſe without an apparent Tumor, and be attended by Froth in the Mouth; if the Fever obſerve the Period of a continual *Tertian*; if the Vein under the Tongue, when open'd, do not bleed; theſe, I ſay, are bad Omens. If the Swelling diſappear of a ſudden, without the Signs of concoction in the Spittle, or diminution of the anxiety of the Breaſt; or if the Head, Pleura, or other Parts are ſeiz'd with Pain and Inflammation, by vertue of the tranſlation of the morbific Matter, we look for Death.

The Cure is either internal or external: The former is the ſame with that of Inflammations in general, provided a due regard be had to the peculiar conſtitution of the Parts; as appears by the following Rules.

1. The volatil Salts and abſorbent Powders above mention'd, join'd to the dulcifi'd Spirit of Nitre and *Laudanum*, are given with good ſucceſs in order to ſweat; eſpecially Horſe-Dung, and the Dung of Birds, as being plentifully impregnated with a volatil nitrous Salt. Nitre diſſolv'd in the ordinary Drink, is alſo much approv'd.

2. Amber, Myrrh, Spirit of Harts-horn, and all Medicines recommended for Catarrhs, are very proper in Quinseys, by reason that the Lymph is always faulty, as well as the Blood.

3. In the beginning of the Disease, we first open a Vein in the Leg, then in the Arm, and towards the height, under the Tongue. Before the Invasion of a Quinsey, if the Patient be not Plethorick, nor the Blood very high, we may order Blood-letting under the Tongue; but in no other case before the height. If the Piles or Terms are suppressed, we must always let Blood in the Leg. In desperate Cases we apply scarify'd Cupping-Glasses to the Neck, Shoulders, and Chin. In fine, the Constitution of the Patient, and other incident Circumstances, must be our Directory for regulating the Measures of Bleeding.

4. Epidemical Quinseys, or such as proceed from the malignity of the Air, must be treated as malignant Diseases, without Bleeding or Purging. And the Physician ought to avoid their Breath, for 'tis very catching.

5. Antimonial Vomits are of singular use in the beginning of the Disease, especially if it be epidemical, or if the Patient be molested with a bitter rusty taste in the Mouth, a tickling heat in the Gullet, and a loathing of Meat. They are improper at any other time, besides the very height of the Disease, when the Suppuration is in some measure advanced, and the Swelling cannot be laid open. Then indeed a Vomit is the last refuge. If the Person cannot swallow any Liquor, let the Throat be tickl'd with *Mercurius Vitæ* and Hony upon a Feather.

6. Purgatives are improper, as being apt to augment Inflammations. Perhaps in the beginning 'twill not be improper to cleanse the first Passages with a Laxative. But Clysters ought to be injected every Day, during the whole progress of the Disease.

7. Blistering Plaisters applied to the Neck, after the first Blood-letting, are not improper.

8. If the Inflammation of the *Tonsillæ*, arising from viscid Lymph, be apt to relapse frequently, let an Issue be cut in the Arm.

9. We must be very nice in distinguishing a Quinsey from a *Prunella*, which generally follows Fevers, and requires the application of such Medicines as are improper for a Quinsey. See the Chapter of *Acute Fevers*.

The external part of the Cure of a Quinſey is perform'd,

1. By Gargariſms, Ointments, Cataplaſms, and Plaiſters of diſcuſſing Ingredents, ſuch as Chamomil and Elder-flowers, Mint, Penny-Royal, Wild Marjoram, Sage, Hyſſop; the Seeds of Dill, Rapes, Muſtard and Cummin; Saffron, Camphyr, Swallow-wort, the Dung of Animals, the Juice of River-Crabs, the Perſons own Urine, the Spirit of Wine, *Sal-Armoniac*, and the Juice of Houſe-leek. The common Practitioners generally add aſtringent Ingredients, whereas they are very pernicious, and augment the Inflamation, by hindring the Bloods acceſs to the Veins: upon which account we only uſe attenuating volatil Ingredients; As, for a Gargariſm, the Decoction of Rapes mix'd with *Sal-Armoniac*. Or,

Take of Lovage-Roots, ſix drams; Smallage-Roots, three drams; Elder-flowers, a handful and a half; Mallows-Leaves, a handful. Boil them in Barley-Water, and add to the ſtrain'd Decoction, Hony of the Herb Mercury, an ounce; Spirit of *Venice* Treacle, ſix drams; Spirit of *Sal-Armoniac*, a dram. Make a Gargariſm.

After the beginning of the Diſeaſe, Gargariſms are improper as requiring a motion prejudicial and painful to the inflam'd Parts. Upon which Account, we order the Patient only to let the Liquor lie in the Mouth for ſome time. As for diſcuſſing Cataplaſms, thoſe of bruis'd Wormwood-leaves mix'd with Hoggs-Fat; or of a Swallow's Neſt boil'd in Wine; and apply'd to the Swelling are of excellent uſe. For a Plaſter, we apply that of Melilot ſoften'd with diſtill'd Oyl of Amber. For an Ointment, the Oyl of ſweet Almonds, mix'd with *Sal-Armoniack*. As alſo the following Oyl.

Take Brimſtone pulveris'd, and Salt of Tartar, of each a dram. Melt them, and let them ſtand till they grow cold. Then pulveriſe the Maſs, and add of the Oyl of ſweet Almonds, three ounces; Oyl of Camphyr half a Dram. Mix, and ſet them to digeſt for three days.

2. If the Tumor be not quickly diſcuſs'd, we muſt ſet aſide all ſharp provoking Ingredients, and endeavour to bring it to maturity by ſoft, temperate, ripening Med'cines. Such are the Decoctions of the Herbs Mallows and Melilot, Marſhmallows-Roots, and Figs, in Whey or Milk, and ſweeten'd with Honey for a Gargariſm; or the Oyl of ſweet Almonds, and Ointment of Marſhmallows, with which we anoint the outward Parts, and then apply the following Cataplaſm.

Take a Swallows Neſt, with the Dung, three roaſted Onyons, and two or three handfuls of Elder-flowers; boil them in Milk,

Milk. Beat the Pulp thro' a Sive, and add half an ounce of *Album Græcum*; half a dram of the distill'd Oyl of Chamomil; and a sufficient quantity of the Oyl of white Lillies, in order to make a Cataplasm.

3. The Tumor being thus ripen'd, we must endeavour to open it, by anointing the Jaws with Hony mix'd with Dog's Dung: Or if that be successless by administring a Gargarism of Mustard-seeds, boil'd in Mead; or of the Oyl of Vitriol mix'd with White-wine; and ordering the Patient to Cough, and Hauk; and in the last extremity, by exhibiting a Vomit, or opening the Larynx.

4. When the Ulcer is open'd, it ought to be cleans'd by the Decoction of Barly or Speedwell, mix'd with Hony of Roses, or Black-smiths Water, for a Gargarism. If it prove very sordid, we may add the rectifi'd Spirit of Salt, or Spirit of Vitriol; and in desperate Cases, touch the Ulcer with *Unguentum Ægyptiacum*, or *Platerus*'s green Water mix'd with Hony. After 'tis sufficiently cleans'd, touch it with an Ointment of Myrrh, Florentin Orris Roots, Burnt Allum and Hony of Roses; and gargle the Mouth with vulnerary astringent Mixtures.

As for the Thrush, or Excoriation of the Mouth, it frequently attends Fevers, when the Stomach is stuff'd with green rusty Humours, and the Physician neglects to cleanse it, and then it reaches from the Stomach to the Tongue. In other Cases it proceeds from the sharpness of the Spittle. If the Crust is black, livid, green, flat, and continues long dry, it portends a tedious Disease. The Cure consists in moistening and softening the affected Part. For which end, let the Juice of Rapes, or Mucilage of Quinces, with Nitre or fresh Butter and Sugar, be applied to the Tongue. If it degenerat into Ulcers, gargle the Mouth with the Decoction of Speedwell mix'd with Hony; or wash the Ulcers with the Phlegm of Vitriol and Plantan-water. In Scorbutical Cases, add the Spirit of Salt, and that of Vitriol; and for Venereal Cases, *Platerus*'s green Water.

The Falling of the *Uvula*, is cur'd by applying to it *Sal-Armoniac* and Pepper; gargling the Mouth with the Decoction of Self-heal, mix'd with *Sal-Armoniac* and crude Allum; or the Decoction of Hemp-seed in Vinegar and Water; and applying to the Crown of the Head, a mixture of Yest, Spirit of Wine, Mastic and Amber.

ART. II.

Of Inflammations of the Stomach, Inteſtines, and Fundament.

THE Cauſes of an Inflammation of the Stomach, are the ſame as thoſe of other Inflammations. The Symptoms are an Acute Fever, a Tumor, a Pain and Senſe of Heat under the ſhort Ribs; an unquenchable Thirſt, Unquietneſs and Watchings. The profundity of the Pain, the comparative inviſibility of the Tumour, and the acuteneſs of its Symptoms diſtinguiſh it from the Inflammation of the Liver, or of the Muſcles of the Belly. Sometimes the Inflammation ſuppurates; and then if the purrulent Matter fall inward upon the Guts, there is not ſo much danger, as if it were diſcharg'd into the external Cavity.

As for the Cure: Purgatives, during the increaſe, are improper: Bleeding ought to be cautiouſly manag'd, by reaſon of the Swoonings and Convulſive Symptoms that attend this Diſtemper. Clyſters are very convenient: But the Sudorifics recommended above for Inflammations in general, are the Baſis of the Cure; eſpecially Antimonial Nitre, or the dulcifi'd Spirit of Nitre, mix'd with the Decoction of Liquorice for ordinary drinking: The Sugar of Lead mix'd with *Poterius*'s *Antibectic*, Pulp of *Tamarinds*, Mineral Bezoar, and Tartar vitriolated. Externally foment with the Decoction of Chamomil and red Roſes in Wine; and apply diſcuſſing Cataplaſms of Aromatick Plants boil'd in Wine. If the Tumor incline to ſuppurat, apply the following Cataplaſm.

Take of Fenugrec-ſeeds, three Ounces; Pigeons-dung, two Ounces; Yeſt, and Hony, of each an Ounce; Oyl of Chamomil, an Ounce and a half. Mix, *&c.*

As for internal Adminiſtrations: In caſe of Suppuration, exhibit Turpentin diſſolv'd with the Yelk of an Egg in Scabious-water, or the rectifi'd Spirit of Tartar and the Juice or Syrup of Scabious. If the Tumor is open, adminiſter the Decoction of Hyſſop mix'd with Hony, or Chalybeat Milk, or the Decoction of China-roots and Scabious-leaves with abſorbent Powders, Balſam of *Peru*, Balſam of Sulphur, and the Oyl or Extract of the Flowers of St. *John*'s Wort: If the Stomach be ulcerated by the corroſion of ſharp Liquors, adminiſter firſt a Vomit, and then the Mucilages of Flea-

wort

wort and Quince-seeds, mix'd with Gum-Tragacanth, and Syrup of Roses.

The Inflammation of the Intestines is caus'd by Dysenteries, Ruptures, Iliac Pains, *&c.* The Symptoms are a Tumor, Heat, and beating Pain; a Lipyria Fever, in which the external Parts are cold, while the internal are unsufferably hot; Costiveness, Retraction of the *Anus*, and Suppression of Urine. If the small Guts are the seat of the Inflammation, it appears about the Navel, and is attended by a difficulty of Breathing, and Vomiting. If the great Guts are only affected, the Swelling appears in the sides of the Belly, the Loins are infested with a weighty Pain, and the Symptoms are more remiss and bear downward. If the Pain attending the Inflammation be suddenly extinguish'd, it notifies a Gangrene. For Cure; let Clysters of Milk, Hony, and purifi'd Nitre be speedily injected; let a Vein be open'd in the Arm oftner than once, if there be occasion; let the Caul of a Sheep kill'd in the very Room with the Patient, be laid upon the Belly, and, if the Pain do not cease, let it be shifted for fresh ones, twice, or thrice; let the distill'd Oyl of Lead, with Oyl of Roses, be applied at other times; and let the dulcifi'd Spirit of Nitre, with *Laudanum Opiatum*, Sugar and Oyl of Lead, and proper Sudorifics, be internally administred.

The Inflammations of the *Anus*, are caus'd by the Suppression of the Piles, excessive riding, and such like external Causes. The Symptoms are the same as those of Inflammations in general. For Cure, open a Vein in the Arm; inject Clysters of emollient Ingredients boil'd in Milk; or if these be insufficient, of Lin-seed and Rape-seed Oyl; and if the Excrements be harden'd, add a Dram of *Sal Gem.* If the Inflammation be so great that Clysters cannot be injected, administer Raisins, or such like gentle Laxatives for opening the Belly; and gentle Sudorifics for promoting Sweat. Externally apply the Decoction of Mint and Agrimony in Wine, or Lime-water; or that of Mullein-flowers, and Henbane-leaves in Whey; or the Mucilage of Quinces extracted with Houseleek-water, and mix'd with Sugar of Lead. If the Inflammation was caus'd by the approach of any sharp thing, such as Paper cover'd with Pepper or Vitriol; foment with the Decoction of emollient Ingredients in Milk, mix'd with the Whites of Eggs. If it cannot be discuss'd, apply *Rulandus*'s Balsam of Sulphur, (made of Sulphur and the Oyl of Poppies) and inject Clysters of Chalybeat Milk-mix'd with

Tur-

Turpentine and Hony of Roſes. After ulceration, apply Fulminatory Gold mix'd with the Oyl of Sweet-Almonds, and exhibit internally vulnerary Decoctions.

ART. III.

Of Inflammations of the Meſentery, Sweet-bread, and Caul.

THE Inflammations of the Meſentery, proceed from the ſame Cauſes as all other Inflammations, particularly from the critical tranſlation of morbifical Matter into its Glandules, from the unſeaſonable ſuppreſſion of a Dyſentery, or from a Rupture haling it out of its natural Seat. The Signs are very obſcure and uncertain, by reaſon of the Meſentery's diſtance from the external ſurface, and its open correſpondence with the Nerves of other Parts, which frequently obtrude the effect upon us, under the notion of the principal Cauſe. However the following Symptoms will give us ſome light into the Matter, *viz.* A ſenſe of weight in the Belly, eſpecially when the Perſon turns himſelf in his Bed; a gentle Heat towards the Navel, a ſmall Pain, and a ſort of Diſtention and Heat under the Stomach; and the Seroſity of the Excrements, or their Mixture with Chyle, when the Stomach is not diſorder'd. 'Tis diſtinguiſh'd from the Inflammations that the Navel is liable to, by the remiſſneſs and dulneſs of its Pain, and inviſibility of the Tumor, or abſence of apparent hardneſs. If the remote Parts of the Meſentery are only inflam'd, the Fever that accompanies is but ſlow; but if the Parts adjacent to the Guts be ſeiz'd, the Fever is acute, the Symptoms much higher, and the Guts ſhare in the Inflammation. When the Tumor ſuppurats, the Fever and other Symptoms are exalted, and when it is ready to break, a ſhivering, and ſometimes a ſhaking ſeizes the Perſon, which are ſometimes follow'd by the evacuation of purulent Matter by Stool or Urine.

Theſe Inflammations are but ſlow-pac'd, and require a long time before they come to maturity. Their Symptoms are ſo obſcure, that they do not much trouble the Patient at firſt, tho' by degenerating into Schirrus's or Ulcers throwing purulent Matter upon the Entrails, they frequently cauſe Hectics, Cachexies, Gangrenes, *&c.* If the purulent Matter be caſt into the Guts, and voided by ſtool, it is diſtinguiſh'd from that of Impoſthumes in the Guts by this

diffe-

difference, *viz.* That from the Mesentery comes in a body, mix'd with some Blood, and without Pain; whereas the other is squeez'd out by drops, with violent Gripings and an acute Fever.

As for the Cure: Since the Fever and Symptoms are not acute, Bleeding is improper; or if any be allow'd, that of the Hemorhoid Veins is only convenient. Purgatives are hurtful; but emollient Clysters are of excellent use. The better part of the Cure depends upon Discussing Sudorifics, especially the Tincture and Spirit of Tartar, the carminative Spirit, the Essence of Steel, the Essences of bitter Herbs, such as Wormwood, Centory, Fumitory, &c. The Essence of Gum Ammoniac, and Chalybeat Diaphoretics. Externally, we apply the Plaster of Gum Ammoniac with that of Hemlock (provided it does not exasperate the Pain. If it do, we conclude that the Inflammation is become an Impost-hume, and the Plaster ought to be remov'd.) When the Impost-hume breaks, and the purulent Matter is voided by Urine, it runs first plentifully, and afterwards intermits; nay, oft-times the Urine it self is very plentiful, and seems to precipitat a laudable Sediment to the bottom, which is nothing else but the melting of the Humors of the Body, and is justly look'd upon as a very bad Sign. Now when we are apprehensive of an Impost-hume, 'twill be requisite to give Diuretics and Abstergents, especially Turpentin dissolv'd with the Yelk of an Egg, and mix'd with Chalybeats; the Balsam of *Peru*, Rhubarb; the Decoction of Sassafras, China, Liquorice, and Jujubes; and the Decoction of Agrimony, St. *John's* Wort, Cichory, &c. in Whey.

The Inflammations and subsequent Schirrus's and Impost-humes of the Sweet-bread, are of the same nature as those of the Mesentery, and equally apt to disguise themselves under the cover of Chronical Diseases, that in effect owe their Birth to them. The like may be said of those of the Caul. Both the one and the other are cur'd as those of the Mesentery, or other Inflammations.

ART.

ART. IV.

Of Inflammations of the Internal Parts of the Breaſt, and particularly of a Pleuriſie and Peripneumonia.

THE Blood being expos'd to the influence of Air in the Lungs, is apt to cauſe Inflammations in the adjacent Parts. When the Lungs or both their ſides are inflam'd, we call it a *Peripneumonia*; if the *Pleura* and only one ſide of the Lungs are affected, 'tis a Pleuriſie. Sometimes the *Mediaſtinum*, Midriff, and the backpart of the Breaſt, or the Membranes of the Shoulders and Neck, ſhare of the Inflammation by turns.

The cauſe of ſuch Inflammations is a vicious Acid, which both provokes the Parts to Contractions, and diſpoſes the Blood for Curdling. The remote Cauſes are cold Air, or cold Drink, after great Heats, violent Motion, exceſſive drinking of ſpirituous Liquors, the ſuppreſſion of the Terms, or of a Dyſentery (which does not radically differ from a Pleuriſie) a Malignant Conſtitution of the Air, the unſeaſonable retreat of a Scab or Cuticular Eruptions, external Bruiſes, Falls, *&c.*

Some of theſe Inflammations are *Benign*; others *Malignant* or Epidemical, as proceeding from the Air: ſome are principal Diſeaſes, others only retainers to other Diſtempers, as Fevers, *&c.* ſome are ſimple Inflammations only of one Part, others complicated, as when the Midriff is inflam'd at the ſame time with the *Pleura*: ſome are continual, others periodical and apt to return frequently after intermiſſions, by reaſon of ſome ſmall remains of the acid Ferment that were not extirpated in preceding Inflammations: ſome Pleuriſies are call'd Aſcending, when the ſeat of the Pain is above the third Rib, reckoning from the Neck, in which Region the Intercoſtal Veſſels are deriv'd from the Axillary; others deſcending, when the Pain is ſeated betwixt the third and ſeventh Ribs, where the Intercoſtal Veſſels are deriv'd from the inferior Trunk of the great Artery. Laſtly, Some Pleuriſies are Genuin, accompany'd by Fevers and other Symptoms relating only to the *Pleura* and one ſide of the Lungs; others are ſpurious, as being free from acute Fevers.

Of the ſpurious Pleuriſies we ſhall mention four Inſtances. 1. When the external Muſcles of the Breaſt and the internal

nal intercostal Muscles are only inflam'd. In this case the Fever is slow, or there's none at all; the Pulse is not very hard, the Pain is gentle and does not shoot, nor is it much exasperated by touching, and the Patient is easie when he lies on the opposite side. 2. When the Lymph or Serum impregnated with a vicious Acid stagnats in the *Pleura*, without inflaming either it or the Lungs. This sort of Bastard Pleurisies frequently invades scorbutical Persons, or those whose nervous System is infirm. Its Symptoms are, a shooting Pain in the Side, without Fever or Thirst, a laudable Pulse, and little or no Coughing. 3. When a sharp serous Humour distends the *Pleura* and intercostal Muscles. This kind of Pleurisies is generally imputed to Wind and Vapors. Its Symptoms are a wandering periodical Pain, that does not shoot, a freedom from a Fever, from Coughing, and bloody Spittings: and a sensible ease accruing by lying on the opposite side to the Part affected. 4. When the Worms in the Guts occasion all the Symptoms that attend a genuin Pleurisie, and are only discover'd by the Disorders of the Belly and Uneasiness of the Stomach, complicated with Pleuritical Symptoms.

The Symptoms common to all Inflammations in the Breast, are, 1. A difficult and frequent Respiration. 2. A continual acute Fever, Head-ach, Thirst, and Watching. 3. A frequent, hard, quick, and intermitting Pulse. 4. The Redness and Inflammation of the Face and Eyes, and especially of that side of the Face corresponding to the inflam'd side of the Lungs. 5. A troublesom Cough, which at first is dry; but afterwards casts forth a thin parti-colour'd Matter, and in progress of time, Blood it self. Towards the declension of the Disease, the Spittings become white, thick, and concocted.

The peculiar Symptoms of a *Peripneumonia*, are a notable difficulty of Breathing, and fear of Suffocation, a heavy pain in time of Coughing towards the lower and hinder part of the *Thorax*, a propensity to Vomit during the first Days of the Disease, and a peculiar exaltation of all feverish Symptoms. Pleuritical Persons are molested with a pricking Stitch in the Side, especially during the time of Inspiration; and are not so apt to vomit. When the *Midriff* is inflam'd, Respiration is more unequal, a dull sense of Pain girds the Belly and Back a little above the Loins; Inspiration is attended by uneasiness about the *Sternum* and lower Parts of the short Ribs; the *Hypochondria* seem to be distended; and the Cough is not so moist as in other Inflammations. The Inflammation of

the

the *Mediastinum* resembles a Pleurisie in all its Symptoms, excepting that of a heavy sort of Pain towards the middle of the fore part of the Breast, without pricking or stinging. If the Inflammation tend to Suppuration, 'tis attended by a Shivering and increase of Pain, a Fever, and other Symptoms, which disappear upon its maturity, and return for a short time while the Skin or Membrane of the Tumor is a breaking.

Inflammations in the *Thorax* are either discuss'd, or evacuated by Spitting, Sweats, Bleeding, Looseness, or a plentiful Flux of Urine. The Inflammation of the Midriff is apt to cause fatal Phrensies. A Pleurisie is not so dangerous as a *Peripneumonia*. If the Patient spit white smooth Matter about the Fourth Day, the Pleurisie disappears on the Seventh; if these Spittings be put off till the Seventh, the Disease is prolong'd to the Fourteenth. If the Person spit but little, and that a thin crude Matter, or pure Blood, or a bilious rusty Humor, with great Pain and Difficulty of Breathing, 'tis a desperate case. The Urine affords no certain Prognostic in these Diseases; since all the true signs of Concoction belong more naturally to the Spittings, which are oft-times concocted when the Urine is crude, and *è contra*. In the beginning of a Pleurisie, or *Peripneumonia*, bilious Vomitings are well look'd upon; but during the further progress of the Disease they're pernicious. A *Peripneumonia* supervening to a Pleurisie or Quinsey is very dangerous; but a Pleurisie following that is a good Omen. Phrensies and Doatings with a ghastly Countenance, and a cessation of Pain, attending Pleurisies are for the most part fatal. In a word, the good or bad Prognostic of Pleurisies and *Peripneumonia's* depends upon the meekness or fierceness of the feverish Symptoms; only the smallness and intermission of the Pulse is not so formidable as in other Cases. If these Inflammations are not quickly discuss'd they become Impostumes, which, if manag'd amiss, occasion a Phthisic.

As for the Cure, the Indications are threefold. 1. To discuss the stagnating Blood. Or, 2. To promote its evacuation by Spitting. Or, 3. To ripen and bring it to a Head. In pursuance of these Designs, let the following Rules be taken notice of.

1. In a *Peripneumonia*, Bleeding is of no use; in a malignant Pleurisie 'tis pernicious; in a benign one it may be serviceable, when the Blood abounds, and the Disease is very acute; but for the most part, 'tis not so proper as Sudorifics,

nor

nor so effectual a preventer of Suppuration. When 'tis put in practice 'twill be of use to distinguish an ascending Pleurisie from the descending; in the former we bleed for Revulsion in the Leg, and for Aversion in the Arm: In the latter, for Revulsion in the Arm, and for Aversion in the Arm of the opposit side. However we ought to draw forth but a small Quantity at one time; and repeat the Operation after short intervals. 2. Purges and Vomits are improper either in Pleurisies or Inflammations of the Lungs. The former are apt to cause a Looseness and retard the Concoction of the Spittings. The latter draw Humors to the Breast, and so cannot choose but be pernicious, unless the Original of the Evil lye in the Stomach, or the Inflammation be degenerat into an Ulcer. Clysters indeed are very convenient, when the Belly is costive. 3. Of all Medicines Sudorifics are the best, especially for Pleurisies. In the beginning we exhibit volatil Salts and Opiats, notwithstanding the violent Heat of the Disease; and towards the height, fix'd Diaphoretics, especially Diaphoretic Antimony. 4. Expectorating Remedies ought not to be administred till towards the height of the Disease, when the Matter begins to concoct. If they are given sooner, they promote Coughing, and consequently the frustraneous and painful concussion of the inflam'd parts, not to speak of the preposterous attempt to evacuat crude Matter. However when their season comes we ought to beware of mixing 'em with Sugar, Hony, or sweet Acids. 5. Opiats are only useful during the increase of the Disease; they allay the Pain, and promote the Concoction of the Matter; but in the height, when the Matter is already prepar'd, they hinder its due evacuation. 6. There's nothing more pernicious than cold Drink. It hurts the Lungs, increases the Inflammation, provokes the Cough, hinders Concoction, and thwarts Evacuation. Therefore let their ordinary Drink be always warm, and such as the Decoction of Barly and Liquorice, mix'd with the Tincture of Poppy-flowers.

Now, as for the Specifics that dissolve stagnating Blood, those for a Pleurisie are equally useful in all Inflammations of the Breast. Such are red Poppies, *Carduus Benedictus*, and *Carduus Mariæ*, especially their Seeds; Chervil-water, the Decoction or Powder of Burdoc-roots, the Juice of Dandelyon, the Soot of Wood-fire given to a dram in Elder Vinegar; the Pizzel of a Whale, or Hart, given in Powder to a dram, or by way of Decoction; the Powders of Boars-teeth, Pike-bones, Pearch and Carp-stones, given to two scruples;

the

the volatil Salt of the Jaw-bone of a Pike; the Blood of a Goat, or of a Hare ſtrangled after Hunting, dry'd and given in Powder, to a dram; the Infuſion or Juice of Horſe or Sheeps Dung, the Powder of Pigeons Dung, *Sperma Ceti* given to a dram with Caſtor; the Spirit of Nitre dulcify'd with the Spirit of Wine impregnated by Cohobation with Antipleuritical Ingredients, given to two drams; the Bezoardic Tincture, given to a dram; the Flowers of Sulphur, or Gunpowder, given to a dram; and Antimony calcin'd by the heat of the Sun. The Forms of Preſcription are as follows.

Take of the Seeds of *Carduus Benedictus*, and *Carduus Mariæ*, of each two drams; white Poppy-ſeeds, a dram; with Chervil-water, make an Emulſion. To which add of the Jaw-bone of a Pike, half a dram; Diaphoretick Antimony, a ſcruple; ſweeten it for a Draught in order to ſweat.

Take of the Waters of *Carduus Benedictus*, and Chervil, of each an ounce and an half; of Treacle-water, ſix drams; clarify'd Juice of Dandelyon, an ounce and a half; prepar'd Crabs-eyes, a dram and an half; Syrup of red Poppies, an ounce and a half. Mix and exhibit two Spoonfuls every quarter of an Hour.

Take of the Extracts of red Poppy-flowers, Holy-hocks, and Miſletoe of the Oak, of each a dram and a half; ſhavings of Boars-teeth, and an Unicorn's Horn, of each two drams; Jaw-bone of a Pike, a dram and a half; the inner Rinds of Filberts, a dram; Antimonial Nitre, half a dram; Magiſtery of Coral, a dram and a half: with the thicken'd Juice of Scabious, make a Maſs; of which a ſcruple is a Doſe, to be given in Poppy-flower Water.

Take of the Waters of *Carduus Mariæ*, Chervil, and red Poppies, of each an ounce; the Spirit of Venice-Treacle camphoris'd, three drams; Diaphoretic Antimony, and Jaw-bone of a Pike, of each half a dram; volatil Salt of the Jaw-bones of a Pike, twelve grains; *Laudanum Opiatum*, three grains; Syrup of red Poppies, an ounce. Mix, and give a Spoonful now and then.

Take of the Blood of a Goat, a ſcruple; Mineral Bezoar, half a ſcruple; *Laudanum Opiatum*, a grain. Make a Powder for two Doſes.

Take of the Spirit of Venice-Treacle camphoris'd, three drams; Eſſence of Saffron, a dram. Mix. Doſe fifty or ſixty Drops.

If theſe diſſolving Medicines cannot diſcuſs the Inflammation by Sweating, we muſt indeavour to promote the Con-

Concoction and Evacuation of the Matter by Spitting. For this end, we first use thickening Ingredients, and after Concoction those of an attenuating force. Of the former sort are the Decoctions of Barly, Liquorice, Elecampane, Scabious, Jujubes, Raisins, Speedwell, red Poppies, *&c.* An Apple excavated, stuff'd with a dram of Frankincense, or Mastic, and half a dram of the Flowers of Sulphur; and so roasted, and exhibited with *Carduus Benedictus* Water; the Spirit of *Sal-Armoniac*, the Conserve of Violets, the Syrup of Poppies with the Flowers of Benzoin, and above all the fresh Oyl of Linseed given to three ounces in a convenient Vehicle; or in want of that, the express'd Oyl of sweet Almonds. As for the latter Indication, *viz.* Attenuating, and Expectorating concocted Matter, 'tis compass'd by adding to the Decoction of these Ingredients in Mead, the Syrups of Hissop, Hedge-mustard or Tobacco, and especially the fresh Juice of Radishes, and dulcify'd Spirit of Nitre.

As for external Application, 'tis proper to allay the Pain by fomenting the Part with the Decoction of Emollient and Anodyn Ingredients, or applying Frogs-spawn with Burdock-roots, or an Ointment of the Juice of Coleworts and Powder of Cummin-seed, or of the Fat of a Country-mouse, or Hens-dung, mix'd with Oyl of Chamomil. Or thus,

Take of the Ointment of Marsh-mallows, an ounce; Oyl of sweet Almonds, half an ounce; distill'd Oyl of Cummin, a scruple; Camphyr, nine grains. Mix and anoint the Part every three Hours, applying afterwards the Plaister of Melilot, mix'd with the Paister call'd *Filii Zachariæ*, and soften'd with the Oyl of Mullein. Every thing must be applied hot, and the Part kept very warm.

If the Inflammation can neither be discuss'd, nor dissolv'd by Expectoration, 'twill be needful to promote its suppuration, by giving inwardly Preparations from Tobacco, Ground-Ivy, Chervil, and Scabious, and applying outwardly Cataplasms of Holy-hocks boyl'd in Milk, or the Plaister call'd *Filii Zachariæ*. After 'tis sufficiently ripe, we must provide for opening it by Vomiting, Sneezing, or administring the Decoction and Smoak of Tobacco, which is of excellent use, especially when the Impostume is seated in the Lungs. Otherwise we may discover the Part where it lyes, by the Heat, Pain, Swelling, *&c.* and open a direct Passage into it betwixt two of the Ribs. When the Impostume opens of it self, its Matter does not always run into the Cavity of the

Breaſt, as many imagine, but is often-times gather'd within the dilated Membran that ſurrounds the Pleura, in which Caſe a *Paracenteſis*, or opening in the uſual place for an *Empyema*, is of no uſe. After opening the Impoſthume, the next thing is to cleanſe it by exhibiting the Decoctions of Chervil, or rather the Syrup or Juice of Ground-Ivy, and Syrup of Tobacco, with the Balſam of Sulphur, Balſam of *Peru*, and the Spirit and Oyl of Turpentin.

Having diſpatch'd the Cure of a Genuin Pleuriſie, it remains to touch briefly at the four Spurious Kinds above mention'd. The firſt of which is treated as other external Inflammations in general. The ſecond proceeding from a ſharp acid Lymph, ſtagnating in the *Pleura*, requires volatil Salts, ſuch as the Spirit of *Sal-Armoniac*, &c. mix'd with Antipleuritical Specifics, and during the increaſe of the Diſeaſe with Opiats. If the Urine be muddy and precipitat a Sediment, 'tis proper to add Diuretics, in order to diſcharge the Matter by Urine, according to Nature's Direction. Externally oily fat things wou'd not be ſo convenient, as dry hot Bags, or Friſtions with a hot Cloth, and a Plaiſter of the volatil Salt of Urine and Turpentin. The third ſort is alſo cur'd by volatil Salts and Diaphoretics, mix'd with Opiats; to which in ſcorbuticul Caſes we add Antiſcorbutics. And laſtly, the ſpurious Pleuriſies that proceed from Worms, are admirably accounted for, by exhibiting *Carduus Benedictus* Water, in which Quick-ſilver is boyl'd, and the Spirit of Sulphur, or dulcify'd Spirit of Vitriol.

ART. V.

Of Inflammations and Ulcers of the Liver and Spleen.

INflammations of the Liver are frequently occaſion'd by the external application of hot Plaiſters, and Cupping-glaſſes, not to ſpeak of the common Cauſes of other Inflammations. As for Diagnoſtics, 'tis needful to obſerve that when the convex part of the Liver is inflam'd, they're attended moſtly by the Symptoms of a Genuin Pleuriſie; and when the Concave is chiefly troubled, the Symptoms of the Stomach and Inteſtines, ſuch as Vomiting, Looſeneſs, Inappetency, Loathing, Sighing, Hickup, *&c.* are the moſt preſſing. The Pain of an inflam'd Liver is always obſcure, heavy, and diſtending; for the ſhooting Pains that ſometimes infeſt the right Hypocondrium,

drium, are justly charg'd to the Colon. The Fever, heat, and such like Symptoms, are not so acute as in other Cases, by reason that the Liver enjoys only a small quantity of arterious Blood. Oft-times the Midriff shares the Inflammation with the Liver, by means of the Ligament which annexes the one to the other; and then the Person is sensible of Pain in the Throat, as if it were pull'd downward when he breaths, he is troubled with a dry ineffectual Cough, difficulty of Breathing, and a quick unequal Pulse, and chooses rather to lye on his Back than on either side.

Thus the Inflammation of the Liver is distinguish'd from a Pleurisie in the Right-side, by the remissness of its Symptoms, the absence of a Stitch or shooting Pain, the dryness and meekness of the Cough, the largeness and openness of the Pulse, the sense as it were of a Weight hanging upon the Right-side of the Thorax, and the easiness of Expiration in respect of Inspiration. 'Tis distinguish'd from the Colic by the Fever, Cough, and difficulty of Breathing, that the Colic is a stranger to; as also from the Inflammation of the Muscles of the Belly, by the anxiety of the Breast, comparative invisibility of the Tumor, intenseness of its Symptoms, and the absence of a beating Pain. Sometimes a reddish black Line appears in the right Hypocondrium, and by its Pain discovers the Inflammation of the Liver. Sometimes the Liver reaches to the very middle of the Belly, and discovers its Tumor in the Centre.

As touching the Prognostic, the Inflammation of the Concave part is more dangerous, than that of the Convex, especially if attended by a Hiccough; if the Fever be very acute, the Belly swoln, and the external Parts cold, while the internal burn within, or if black greenish Matter be vomited, 'tis a desperate Case. If the Inflammation and Fever continue above twenty Days, it degenerats into an Ulcer or Schirrus; and the purulent Matter is voided mostly by Stool or Urine, or at least but very rarely by Vomiting or Spitting. If a copious Evacuation of Urine follow the use of Nitre, 'tis a good Omen.

The internal Cure is compass'd by Antipleuritical Medicines, such as the Sugar of Lead, or rather the Crystals of Lead, with Spirit of Nitre, Antimonial Nitre, Diaphoretic Antimony, volatil Salt of Vipers, and the common Sudorifics mix'd with *Laudanum Opiatum*, and bitter Aperients. Externally we apply the Spirit of Wine camphoris'd with Plantan-water, or Nitre with Vinegar of Roses and the Juice of House-leek; or what follows.

Take of the Ointment of Marſh-mallows, half an ounce; Oyl of Wormwood, two drams; diſtill'd Oyl of Dill, a ſcruple; Camphyr, nine grains. Make a Liniment, and anoint the Part. Or,

Take of the Waters of Henbane, Plantan, and Water-lillies, of each an ounce; purify'd Nitre, half a dram; Camphyr diſſolv'd in Spirit of Wine, fifteen grains. Make an Epithiema, to be applied warm.

Sometimes the Inflammation of the Liver proceeds from exceſſive Venery, and 'tis cur'd thus. Take a living black Cock and cut out his Liver, which bruiſe in four ounces of Vinegar of Roſes, 'till it be quite diſſolv'd. Then ſtrain the Vinegar, and exhibit it warm for a Draught; in the mean while, let the Patient take every Morning a Draught of the Decoction of Liquorice, Cichory, Rhubarb, Leſſer Centory, Liverwort, and the inner Rinds of Elder; adding to every Draught a Scruple of *Sperma Ceti*.

If notwithſtanding theſe Precautions the Inflammation come to a head, which will appear by the Fever, Heat, and Shiverings that attend it, and their abatement when 'tis over; in that Caſe we exhibit inwardly the Decoction of China-roots, Liquorice and Raiſins: And apply emollient Cataplaſms, with Saffron, and Wormwood-tops. If the Swelling be ſeated in the Convex Part, it may be open'd with a Knife, or a Potential Cauſtic. If it lye in the Concave Side, we muſt endeavour by all means to break it, and when 'tis broken follow the conduct of Nature, in promoting the evacuation of the purulent Matter. As, if it be emptied into the Guts, we exhibit Mead for tempering its ſharpneſs, and inject Clyſters; if it be diſcharg'd by Urine, we adminiſter Oxymel, with the Decoctions of Smallage, Parſley, Juniper-berries, *&c.* in Mead. If it recoyl into the Stomach, and cauſe a Vomiting, we forward it with fat Broth, Oyl of ſweet Almonds, *&c.* If it corrode the Membran, and caſt it ſelf into the Cavity of the Abdomen, 'tis a very dangerous Caſe, in which ſome chooſe to open the Abdomen, and give vent to it; in the mean while we exhibit inwardly the Decoctions of China, Sarſaparilla, and the Vulnerary Ingredients, to which we add Turpentin diſſolv'd in the Yelk of an Egg, or the Balſam of Sulphur prepar'd with Oyl of Turpentin.

The Inflammations of the Spleen ought to be nicely diſtinguiſh'd from thoſe of the adjacent right Kidney; the former being attended by a beating Pain, towards the fore-ſide of the

Abdo-

Abdomen, difficulty of Breathing, a moderate continual Fever; whereas the Inflammations of the Kidney display themselves mostly in the Back, and their Fever is very high, without any sensible Pulsation. In Inflammations of the Spleen, Bleeding at the left Nostril, Fluxes of the Piles, a Looseness and plentiful Evacuations of Urine, attended by the signs of Concoction, are good Omens. Their Cure is the same with that of other Inflammations; internally all Preparations of Lead, mix'd with Diaphoretics; and externally, the Plaister of Hemlock with the Oyl of Camphyr, and the Syrup of Elder with Sugar of Lead, are of excellent use.

ART. VI.

Of Inflammations and Ulcers of the Kidneys.

THe Inflammations of the Kidneys may proceed from Riding, Falls, Jumping, Stones in the Kidneys, excessive Venery, *&c.* Their Symptoms are; a heat of Urine and Strangury; a sense of heat and pain in the Loyns, which by the Correspondence of the Membrans, frequently reaches upwards to the short Ribs, and along the Back, so that the Person cannot bow his Body, and besides is frequently molested with Vomiting; and likewise downwards towards the Ureter, Bladder, Huckle-bone and Thigh, causing a numness in the Legs. Sometimes when one Kidney is inflam'd, the other is either by Sympathy seiz'd with Spasmodical Contractions, or so oppress'd with the Quantity of Blood, that 'tis unfit for secretion, and causes a Dysuria: To these Symptoms we add Costiveness and the Chilness of external Parts. Sometimes a simple Stone in the Kidneys, apes the Symptoms of an Inflammation; but the continual Duration and Pulsation of the Pain, the acute continual Fever, the heat and difficulty in making Water, that attend the latter, and are strangers to the former, will point out the Distinction. If an Inflammation of the Reins happen to weak puny Persons, or be attended by doating, or if it become an Ulcer, 'tis very dangerous. The Flux of the Emroids is a good sign; but white purulent Urine, with the abatement of the Fever, and extenuation of the Legs and Thighs, is a certain forerunner of Death.

As for the Cure, the external Remedies are the same with those prescrib'd for a Quinsey, and the internal are the Specifics for a Pleurisie, particularly Nitre, Sugar of Lead, and

the Juice of River-Crabs, given with the Decoction of Prunes, or the Emulsions of cold Seeds. Purgations are noxious, unless Crudities disturb the Stomach, in which Case the gentlest Laxatives are only allowable. Emollient Clysters, or those of Milk, Turpentin, and the Yelks of Eggs, are proper. Diuretics in the beginning increase the Inflammation, but when the Matter is concocted, the more temperat sort of 'em is useful, especially Winter-Cherries, Liquorice, Turpentin, &c. Or,

Take of the Waters of Winter-Cherries, Broom and St. *John*'s Wort, of each an ounce; distill'd Vinegar, six drams; dulcify'd Spirit of Nitre, half a dram; Tartar vitriolated, fifteen grains; Syrup of Ground-Ivy, half an ounce. Mix. Dose a Spoonful or two.

Externally, we first blood 'em in the Arm, then in the Ancle; and apply the Juice of House-leek, with the Juice of River-Crabs and Camphyr, to which we sometimes add the Oyl of Henbane, or express'd Oyl of Poppies. *Langius* recommends an Ointment of Crude Allum, mix'd with the Whites of Eggs. If by these means the Inflammation cannot be discuss'd, we must promote its Suppuration inwardly by the Decoction of Liquorice, Barly, Pellitory of the Wall, &c. And outwardly by Cataplasms of emollient Ingredients boil'd in Milk.

Ulcers of the Reins are sometimes the effect of Inflammations, and sometimes of the Corrosion of a Stone. The former are less dangerous, and are attended by a whitish Urine, which by standing precipitats a white purulent Sediment, whereas in the latter Case the Sediment is ashy colour'd, and the Pain in the Loyns more biting and gnawing. In either Case fetid Stools are a good sign. For Cure we first exhibit a Vomit, in order to cleanse the Ulcer, then Pills of sweet Mercury with Turpentin or Balsam *Capaivi*; the Decoction of Woods, Parsley, Chervil, Chiches and Agrimony, and above all the Troches of Winter-Cherries, and the Powder of dry'd River-Crabs. Or the following Decoction.

Take of Agrimony and Flowers of St. *John*'s Wort, of each a handful; Mastic-wood, an ounce and a half; Comfrey-roots, half an ounce; Seeds of St. *John*'s Wort, three drams. Boil them in Water, &c. The Spaw-Waters and absorbent Powders are also not improper. If the Ulcer be seated in the out-side of the Reins, and seize the Muscles of the Back, it ought to be laid open.

ART.

ART. VII.

Of Inflammations and Ulcers of the Bladder.

THE Bladder, having only a few ſmall Blood-Veſſels, is ſeldom or never inflam'd by internal Cauſes; but for the moſt part by external Injuries, or the aſſumption of *Spaniſh* Flies, or the cutting of the Stone. The Symptoms are a Diſtention, Heat, Hardneſs, Tumor, and unſufferable Pain in the Pubes; a ſuppreſſion of Urine, Teneſmus, Coſtiveneſs, acute Fever, and ſometimes Doating. It is a dangerous Diſeaſe, as being very apt to degenerat into a Gangreen, unleſs it be ſeated in the muſcular Neck of the Bladder, in which Caſe it oft-times ſuppurats and becomes a troubleſome Ulcer. The Suppuration is diſcover'd by the Remiſſion of the Symptoms; and when the Ulcer breaks by the evacuation of Purulent Matter with the Urine, without it break into the Cavity of the Abdomen, in which caſe it frequently gains a Paſſage by Impoſthumes in the Groin.

For Cure, we treat theſe Inflammations after the ſame manner, as thoſe of the Kidneys, in order to diſcuſs 'em. As for Injections of cooling Liquors they're altogether uſeleſs, partly becauſe they do not reach the Part, and partly becauſe, ſuppoſing their entrance into the Bladder, they cannot conveniently be avoided again. The Ulcers of the Bladder ought to be carefully diſtinguiſh'd from thoſe of the Urethra, which frequently void purulent Matter, without the Urine, and cauſe a violent Pain in making Water, which is not found in Ulcers of the Bladder, unleſs they be ſeated juſt in its Neck. Ulcers are cur'd by dulcifying the Humors of the Body, and conſequently the Urine; cleanſing and conſolidating the Ulcer, and mitigating the Pain. The Ingredients that are proper for theſe Purpoſes are frequently mention'd above. The Forms of Recipe's are as follows.

Take of the Herbs Agrimony, Plantan and Horſe-tail, of each half an handful; Liquorice-roots, two drams; boil them in Plantan and Betony-water, till the third part be conſum'd. To half a pound of the ſtrain'd Liquor, add Hony of Roſes, an ounce and a half. Mix, and exhibit a Draught twice a Day, for mitigating the ſharp Humors; for which end the Decoction of Ground-pine in Milk is alſo very uſeful.

Take of Turpentin, ſix drams; Hony, an ounce; with the Yelk of one Egg, diſſolve 'em in four ounces of *Spaniſh* Wine. Mix. Doſe, ſix drams; for the above-mention'd uſe, and for cleanſing the Ulcer.

Take of the Shavings of *Lignum Sanctum*, three ounces; Roots of Sarſaparilla, Liquorice, and Eryngo, of each an ounce; of the Herbs, Agrimony, Speedwell, and Ground-Ivy, of each half a handful; Flowers of Roſes and Violets, of each three Pugils; Raiſins, an ounce and a half. Boil them in Water, and exhibit a Draught of the ſtrain'd Decoction frequently, for conſolidating the Ulcer.

Take of Liquorice-roots, two ounces; red Vetches, a little handful; the Rinds of Beans, an ounce; Plantan-leaves, a handful; Boil them in Water, with a little Lye, adding two ounces of Turpentin diſſolv'd in Hony to a pound of the ſtrain'd Decoction; and in deſperat Caſes the Ointment *Ægyptiacum*. Mix, and inject it with a Syringe for cleanſing the Ulcer.

Take of Ladies-mantle, and Tops of St. *John*'s Wort, of each a handful; Marſhmallow-roots, half an ounce; boil them in Lime-water, adding to ten ounces of the ſtrain'd Liquor, an ounce of the Syrup of Comfry, and three or four drams of the vulnerary Eſſence. Mix, for injection, in order to conſolidat. Bathing in hot Baths, and drinking Spaw Waters, are much approv'd, both for Inflammations and Ulcers of the Bladder.

ART. VIII.

Of a Phrenzy or Inflammation of the Membranes of the Brain.

THE Inflammation of the Membranes, and ſome part of the Subſtance of the Brain, was call'd by the Ancients *Sphacelus*; as that of the Midriff, was call'd *Phrenitis*, from Φρένες, *Diaphragma*; and indeed all derivative Words ending in *tis*, ſignifi'd the Inflammation of the Part, whoſe Name they're deriv'd from, as *Pleuritis*, *Hepatitis*, *Nephritis*, &c. However, that we may not depart from the cuſtomary Way of ſpeaking, we ſhall treat of the Inflammations of the Brain, under the Name of *Phrenitides*, or Phrenſies. Their Symptoms are a viſible beating in the Carotid Arteries, and an unſufferable tearing Pain in the Head, obliging the ſick Perſon to throw, toſs, and as it were, beat his

his Head, and furiously pull at the Hair. They are attended by doating, and are apt to degenerat into fatal Gangrenes, at which time Convulsions, prostration of Strength, and a sort of Lethargy insue. Their Urine is pale, crude, and white; and if their Stools be also white, if the Teeth gnash, the Nose drop, and the Person tremble, shake, and pick at the Bed-Cloaths, 'tis a desperate Case. Sometimes Phrenetic Persons are only molested with frightening Dreams, and a timorous inward Doating, without any Noise, which is a worse Symptom than open Fury, loud Out-cries, and violent Tossings of the Limbs. A Phrensie is distinguish'd from a simple Delirium, by the unrelenting vehemence of the Fever and Head-ach, and a Difficulty of Breathing. Sometimes, but very rarely, a Phrensie terminates in critical Sweats, Bleeding at Nose, Looseneſſes, *&c.* Sometimes it terminates in an incurable Impostbume in the Brain. A true Phrensie for the most part is incurable; however its Cure is attempted by Bleeding, Vomits, Clysters, and Diaphoretics, Of which more in the Second Book.

ART. IX.

Of the Genuin and Spurious Inflammations of the Eyes.

A Genuin Inflammation of the Eyes is either Sanguine or Serous. The former is call'd *Ophthalmia*; the latter *Epiphora*, or *Lippitudo*. An *Ophthalmia* is an Inflammation of the Tunicles of the Eye, especially the Conjunctive, which by reason of their Derivation from, and being of a piece with the Membranes of the Brain, are apt to communicate their Disorder to the Brain; as on the contrary, the Disorders of the Brain are frequently display'd in the Eyes. The External Cause is whatever provokes the Fibres to contraction, and consequently obliges the Blood to stagnate in the small Arteteries, which are very plentiful in the Coats of the Eyes; as the sharp *Effluviums* of the Air, Dust, Steams of Metals, *&c.* The Internal Cause is the suppression of any Evacuation of Blood, or the retention of a sharp Acid in the Body, as after the Small Pox, or when the running of the Ears, customary to Children, ceases. Sometimes an Inflammation proceeding from the *Effluviums* of the Air, is epidemical; and sometimes 'tis catching. The Symptoms of an *Ophthalmia* are, the Heat, Tumor, Redness, Pain and Watrineſs of the Eyes. In its higheſt

higheſt pitch, the Eye-lids are likewiſe inflam'd, and unable to ſhut, and the White of the Eye is ſwell'd up above the adjacent Surface, with a ſort of Chink betwixt 'em. If the ſtagnating Blood proceed from the outer Veſſels, we obſerve a Pain, Tumor, and beating in the Temples; if from the internal Membranes and Veſſels, the Pain is more vehement, and lies deep, the Palate and Noſtrils itch, and the Perſon is apt to ſneeſe often.

As for the Epiphora and Blear'dneſs of the Eyes, the former is a Deſtillation of a Cold or Hot Rheum from the Glandules in the Corners of the Eyes; the latter from the Glandules of the Eye-lids, in conjunction with thoſe of the Eyes. Their Cauſes are,

1. The Laxity of the Glandules, as in old Perſons, and in malignant Diſtempers, when the animal Spirits are almoſt extinguiſh'd; or when the Caruncle that ſhuts them is corroded or cut. In this Caſe the Eyes are apt to be red, for that the Blood Veſſels ſwell when the Glandules are ſo often emptied.

2. The irritation of the Eye and its Glandules, by ſharp *Effluviums* from the Air, Pepper, Onions, Garlic, *&c.* This Cauſe is at the ſame time apt to cauſe an *Ophthalmia.*

3. The ſharpneſs and acidity of the Lymph, which tickles, provokes, and corrodes the Glandules. The Corroſion is frequently follow'd by a roughneſs, and that by a thickneſs and intranſparency; and conſequently, a total blindneſs. The Remote Cauſes are whatever is apt to occaſion Catarrhs.

All theſe Inflammations, whether ſanguin or ſerous, are attended by a watrineſs or the running of a Humour that is either ſharp, ſaltiſh, corroſive, and apt to gaul the Cheeks; or inſipid, ſlimy, thick, and apt to make the Eye-lids ſtick together. The former is call'd a hot Catarrh, the latter a cold one. The various condition of this Catarrh, preſents us with four obſervable Periods in an Inflammation. The *Firſt*, is call'd the Beginning, *viz.* When the Humour is thin and plentiful. The *Second*, the Increaſe, when the Pain grows, and the Humour thickens. The *Third*, the Height, when the Humour is concocted, and makes the Eye-lids ſtick together. The *Fourth*, the Declenſion, when all the Symptoms relent. But withal, we ought to remember that this Humour is ſometimes the Effect, and not the Cauſe of the Diſeaſe, as in the caſe of external irritation; for which Aſtringents are proper, tho' noxious in other Caſes.

A

A Spurious Inflammation is distinguish'd from the Genuin, by its comparative dryness, and admits of three Degrees.

1. When the Eyes itch, and void a small quantity of a saltish Rheum.

2. When the Eyes are red, swollen, heavy, and molested with a gentle Pain and Itching, without any Flux of Matter.

3. When the Eye-lids are hard and rough, without itching or running.

The Inflammations of the Eyes, proceeding from the Disorders of the Membranes of the Brain, are very dangerous. If the Pain continue long, 'tis an ill sign. If the Inflammation be very tedious, or apt to relapse, it threatens a thickness of the Membranes, or Webs, Scars, and loss of Eye-sight: If it tend to suppuration, it threatens a Gangrene, which, if the Eye be not quickly extirpated, is apt to invade the Brain, the consequence of which is certain Death. A dry or spurious Inflammation is tedious, but not so dangerous as a wet one. Sometimes critical Loosenesses give the solution of the Distemper. As for *Epiphora's*, if they prove inveterat in adult Persons, they degenerat to a *Fistula Lacrymalis*, which is oft-times incurable.

As for the Cure: When the Inflammation proceeds from external Causes, a few external Medicines may give relief. But when the Cause is internal, we proceed thus. First of all we open a Vein in the Leg, then in the Arm, and afterwards, but no sooner, in the Forehead, if it can be done without straitening the Neck. In desperat Cases, we open the Jugular Veins, and sometimes the Temporal Artery. Blistering Plaisters apply'd to the Nape of the Neck, are of excellent use, for that they occasion a plentiful Flux of Blood into the outer-branch of the Artery of the Neck, which must needs drain the inner-branch that visits the Eyes. They are best prepar'd of *Emplastrum Citrinum*, mix'd with the Powder of Cantharides without Acids; and the Blisters ought to be kept long open with the Plaister of Cerus mix'd with a small quantity of the Powder of Cantharides. In Hydropical Persons, or such whose Skin does not easily heal, Blistering Plaisters may be omitted. In difficult Cases, we order Issues in the Arm or Leg of the same side with the inflam'd Eye, and a Setum in the Neck: Instead of a Setum, some chuse to make a sort of Issue in the Ear, thus; Take the Root of Hellebor, or Mezereon, dry it, and slice it into little round pieces, which macerat in the Solution of Nitre in

Water

Water, or the Lye of the Aſhes of Vine-twigs. Bore a Hole in the Ear, and promote its Suppuration for three Days with a Thread dawb'd with Butter, and then put in one of theſe Pieces thus prepar'd, renewing 'em every Day. Internally, we exhibit Jalap for a Purge, and the Decoctions of China-roots, Saſſafraſs, Sarſaparilla and Juniper-wood, to which we add the Cephalic Dryers, ſuch as Fennel, Eye-bright, Valerian, Betony, Roſemary, and their Eſſences. If the Inflammation proceed from Mineral Fumes, we give Mineral Preparations inwardly. In external Applications, we ought to avoid *Opium*, and Milk, tho' commonly us'd. The former ſhuts the Pores, and promotes a Gangrene; the latter is alſo charg'd with the ſame Crime, and beſides, is apt to Curdle and become Acid, and by conſequence muſt needs be prejudicial to the Eyes. In the beginning of the Diſtemper, while the heat, pain, redneſs, and ſharpneſs of the Rheum prevail, abſorbent Powders are proper, ſuch as Tutty, Ceruſs, Chalk, Flowers of Tin, Crabs-eyes, Calaminar-ſtone, *&c.* In general, the Water of Frogs-ſpawn, the Water diſtill'd from bruis'd River-Crabs, when they begin to putrifie, and diſtill'd again with the Juice of Celandin; the Oyl or Liquor *per deliquium* of Blew-bottle or Succory-flowers, they being gather'd in the Morning when wet with the Dew, and put into a thick Glaſs, encompaſs'd with a thick Cruſt of Dough, and ſo baked in an Oven till they melt into a Liquor; the Phlegm of the Spirit of Vitriol, the Oyl of Sugar *per Deliquium*, or Sugar it ſelf ground in a new Tin Platter till it become livid; the Sugar of Lead, Camphyr; the Mucilages of Flea-wort and Quince-ſeeds, extracted with Celandine-water; the Phlegm of Allum, Whites of Eggs, the ſtrain'd Decoction of the Litharge of Gold in Vinegar, the Infuſion of *Crocus Metallorum* or the Glaſs of Antimony; and in the height of the Diſtemper Collyriums prepar'd with white Vitriol, are all approv'd Medicines. If the Inflammation proceed from external Cauſes, the above-mentioned Mucilages, or a Piece of raw Beef or Veal applied to the Eye, will finiſh the Cure. If the Rheum be very ſharp and corroſive, we inſiſt much upon fix'd abſorbent Powders; if it be thick and ſlimy, diluting Medicines and gentle Aſtringents are convenient: Theſe Ingredients are preſcrib'd in various Forms. As,

Take of the Mucilages of the Seeds of Quinces, Clary, and Fenugrec, extracted with Celandin-water, of each half an ounce; Sugar of Lead, twelve grains. With Fennel or Eye-bright-water, make a Collyrium.

Take

Take of Plantan and Eye-bright-water, of each an ounce; prepar'd Tutty, half a ſcruple; Camphyr, five grains; Saffron, two grains. Make a Collyrium, to be us'd after the Small-Pox.

Take of Tormentil or Plantan-water, of each an ounce; mix 'em with the White of an Egg, and ten grains of Allum. And apply it warm to the Eyes.

Take of the Glaſs of Antimony in Powder, from ten to fifteen grains; infuſe 'em in three ounces of the Water of Frogs Spawn. Let 'em ſtand all Night in a hot place. Strain the Liquor in the Morning, and add to it ten grains of the Sugar of Lead in fine Powder, and ſix grains of Camphyr.

Take an Egg, boil it hard, and take out the Yelk, putting into its place ſix grains of the Sugar of Lead, eight grains of white Vitriol, two grains of Camphyr, and half an ounce of the Hony of Roſes. When they're melted, ſqueeze out the Liquor and drop it into the Eye, eſpecially when the Rheum is ſlimy, and apt to make the Eye-lids ſtick together.

Take of Roſe-water and Plantan-water, of each two ounces; Night-ſhade-water, an ounce; white Vitriol, a ſcruple; diſſolve and ſtrain, then add a ſcruple of prepar'd Tutty. Make a Collyrium; in which dip a Clout, and apply it warm to the Eyes, about the height of the Diſtemper.

Take of the Ointment Diapompholigos, aud that of Tutty, of each two drams; prepar'd Pearl, Coral, Crabs-eyes, Tutty, and Sugar of Lead, of each a ſcruple; Camphyr, twelve grains; Leaves of Gold and Silver, of each four. Make an Ointment. With which, anoint the lower part of the Eye-lids, and put about the bigneſs of a Lentil into the corner of the Eye.

Take of ſweet Apples roaſted, three in number; boil them in Eye-bright-water till they be ſoft; beat their Pulp thro' a Sieve, and add of prepar'd Tutty, two Drams; Camphyr, ten grains; Saffron, four grains. Make a Cataplaſm for allaying the Pain and Heat.

Take of freſh Butter, half an ounce; Sugar of Lead, prepar'd Tutty, and Calaminar-ſtone, of each a ſcruple; Camphyr, a grain. Make a Liniment for anointing the Eye-lids in a dry Inflammation.

A ſerous Inflammation is cur'd by extracting the external Objects that diſturb the Eye, or correcting the Acrimony of the Lymph, or ſtrengthening the Glandules. For the firſt purpoſe,

poſe, we apply to the Eye, a Crab's Eye ſo contriv'd that its hollow part touches the Apple of the Eye, or a Seed of Clary; or we make uſe of Inſtruments, ſuch as *Hildanus* recommends. The Second Indication is conſider'd in the Chapter of *Catarrhs*. The Third is compaſs'd by moderat Aſtringents, outwardly applied; ſuch as the Decoction of the Rinds of Pomgranats, with Chamomil-flowers, eſpecially after the Small Pox; the Infuſion of Tormentil-roots, and Allum, in Plantan and Roſe-water; or of Tutty in Fennel-water; the Powder of Citrine Myrobalans infus'd three or four times in Roſe-water, and dry'd afreſh every time; the Liquor that flows from a Willow cut in the Spring; the Decoction of dry'd Rue in Vinegar and Hony; or that of Cows-bones and the Chaff of Wheat, recommended by ſome as a valuable *Arcanum*; a mixture of the White of an Egg, Roſe-water, and Sugar beaten in a Tin Plate; the Decoction of Quince-leaves; the Infuſion of the Powder of Calaminar-ſtone (upon which the Spirit of Wine has been kindled) in White-wine, or Roſe-water; or that of the Powders of Tutty, Sarcocol, Roman Vitriol and Sumac, in Eye-bright and Fennel-waters. The uſe of Sneezing-Powders is much dreaded by ſome, but the Veſſels leading from either Eye to the Noſtrils, diſcover'd by *Steno*, and the Experiment of *Collyriums* reaching the Mouth, ſeems to juſtifie it. However, ſince ſo many tragical Evils have been obſerv'd to follow 'em, we ought to be very cautious, and never preſcribe any but what are very gentle, and that in the declenſion of the Diſtemper, or when the Inflammation ceaſes.

ART. X.

Of Inflammations and Ulcers in the Ears.

THe internal Membran of the Ears is ſometimes inflam'd, either by internal or external Cauſes. Its Symptoms are a Beating, Heat, and Pain; ſometimes a Redneſs of the external Ear, Temples, and Cheeks, eſpecially when the Inflammation bends outwards; and ſometimes a Fever, Doating, and Convulſions when it bends inwards.

In Children 'tis more dangerous than in old Perſons. When it ſuppurats, 'tis leaſt dangerous, and ſometimes infers a critical Solution of Head-aches: But if the purulent Matter be corroſive, it may gnaw the Membrane, and cauſe Deafneſs.

'Tis

'Tis cur'd by Sudorifics and Bleeding, or applying Leeches, or ſcarifying behind the Ears. External Remedies ought to be very cautiouſly us'd. At firſt, we muſt endeavour to diſcuſs it by dropping into the Ear the Balſam of Sulphur, or Oyl of Chamomil in which Earth-Worms or River-Crabs have been boil'd; or the Oyl of the Yelks of Eggs, with the Juice of Houſe-leek; and fomenting the Ear with the Decoctions of emollient and diſcuſſing Ingredients; or applying to it the Spirit of Wine, or Spirit of *Sal-Armoniac*, with hot Bread. If it be not quickly diſcuſs'd, we muſt promote its ſuppuration by applying a Cataplaſm of the Crumbs of Bread boiled in Goats-milk, mix'd with the Yelks of Eggs, Oyl of Roſes, and Saffron; or of roaſted Onyons, Butter, Oyl of Chamomil, Oyl of Sweet-Almonds, and Saffron.

The Ulcers of the Ears are either the effect of a preceding Inflammation, or of a corroſive ſharp Humour; ſometimes we meet with a Flux of corrupt bloody Matter, that reſembles that of Ulcers in the Ears, tho' in the mean while there be none; in which caſe we only waſh the Ear clean with Man's Urine, but are cautious of ſtopping it, eſpecially in moiſt Conſtitutions, or thoſe who are liable to Diſorders of the Brain, or Eruptions in the Head.

The real Ulcers of the Ears are cur'd internally by Purgatives and Sudorifics, eſpecially the Decoctions of Woods. Externally they are cleans'd by dropping into 'em Child's Urine with White-wine and Hony; or applying a Tent dipt into it. If the Ulcer be inveterat, we add the Ointment *Ægyptiacum*; the Juice of Wormwood, Hore-hound, or Onyons mix'd with Hony, are alſo recommended for the ſame uſe. When the Ulcer is cleans'd, and the Flux of Matter abates, we add Tutty and Pompholyx, for conſolidating.

CHAP. II.

Of the Effuſion of Blood into the Cavities of the Body, and particularly of an Empyema.

WHen the Blood ſtagnates in its own Veſſels, and is converted into Purulent Matter, it cauſes a *Vomica* or Impoſthume in ſeveral Parts of the Body, which we diſpatch'd in the laſt Chapter. But when this purulent Matter is collected in a diſtinct Cavity 'tis call'd an *Empyema*, which is the Subject of this Chapter: 'Tis true, the ancient *Grecians* meant by

by *Empyema*, any Collection of purulent Matter in any part. But since the modern Latin Writers have christen'd it otherwise, we choose to follow their Examples. The immediat Cause of an *Empyema*, is either the direct effusion of Blood into the Cavity it self, which stagnats, curdles, and by fermenting becomes *Pus*, as when the Breast is wounded; or the eruption of purulent Matter from its own Impostbume into a forreign Cavity, as when a Pleuritical Impostbume breaks, it oft-times throws its Matter into the Cavity of the Breast, and gives rise to what we call, κατ' ἐξοχὴν, an *Empyema*: Tho' sometimes the Pleuritical Matter is contain'd within a Purse of the dilated *Pleura*, while 'tis erroneously referr'd to the Cavity of the Breast. The remote Causes are Bruises, Falls, Wounds, or whatever breaks the Vessels, and occasions the extravasation of Blood.

The Symptoms discovering the extravasation of clotted Blood, relate either to the Belly, Breast, or Head. 1. Those for the Belly, are the Swelling, Paleness, Lead-colour, and hardness of the Abdomen, occasion'd by the Convulsions of the *Peritonæum*, when provok'd by the clotted Blood; and sometimes Swoonings, prostration of Strength, difficulty of Breathing, and critical Impostbumes about the Groin.

2. Those for the Breast are a notable difficulty of Breathing, a troublesome Cough, a Pain and Sense of Weight about the short Ribs, an acute Fever, and the coldness of the external Parts.

3. Those which discover a Collection of clotted Blood in the Head, are a violent beating and pain in the Head; an involuntary watriness of the Eyes, redness of the Face, disorders of the Stomach, and critical Bleedings, at Mouth, Nose or Ears. In all these Cases shivering and the increase of the Fever are Signs of Suppuration. After the Matter is concocted it begins to float, and the severish Symptoms relent.

Of the *Empyema's* that proceed from the efflux of Purulent Matter out of some Impostbume into the Cavity, those which follow the suppuration of a Pleurisie or *Peripneumonia* are most remarkable; and upon that account we shall content our selves with an account of their Symptons, which may serve as a Pattern for all others.

The Impostbume generally breaks about the twentieth, thirtieth, or fortieth Day; being attended by a shivering, high Fever, a perpetual Cough with a hollow sound, and a sense of rebounding Matter, as being tost'd by the Convulvulsions of the provok'd Midriff; and a difficulty of Breathing,

thing, with an oppreſſing heavineſs in the Breaſt when they Stand or Sit, of which they are freed when they lie on their Backs. When they ſtoop they are in danger of Suffocation, by reaſon of the weight incumbent upon the Midriff. The Fever which at firſt was acute becomes ſlow, hectic, and liable to nocturnal Exaſperations. They are ſubject to frequent Palpitations of the Heart, Anxieties of the Breaſt, nocturnal melting Sweats and Fluſhings in the Face, eſpecially the Cheek of the ſame ſide with the part affected. When the Diſtemper is far advanc'd, a rotten aſhy taſte invades the Mouth. The Pulſe in the Wriſt of the ſame ſide intermits while that in the other obſerves its regular Periods. A ſoft Tumor frequently beſets the Ribs, which perhaps proceeds from the tranſpiration of the thinner part of the Matter, and the Patient finds moſt eaſe by lying on the ſame ſide.

As for the Prognoſticks of *Empyema's*; thoſe of the Brain attended by Vomiting are Mortal; nay oft-times the Patient dies before the clotted Blood comes to a Head. Thoſe of the Abdomen are frequently diſcharg'd by Impoſthumes in the Groyn. Thoſe of the Breaſt, if they be not cur'd betimes, are apt to cauſe Phthiſics and Conſumptions. If white Purulent Matter be voided by Stool or Urine, or copiouſly expectorated in an *Empyema* of the Breaſt; and if the Thirſt, Inappetency, Fever, and difficulty of Breathing relent, 'tis a good Omen: But the reverſe of theſe Circumſtances is fatal.

The Cure conſiſts in diſſolving and evacuating the clotted Blood; or promoting its ſuppuration, evacuating the *Pus* and reſtoring the injur'd part to its due ſtrength. As for the evacuating Indication, the efforts of Nature muſt be our Directory; as, if it incline to void the Matter by Urine, Sweat or Stool, it muſt be accordingly aſſiſted. If the clotted Blood be lodg'd in the Abdomen, we give it Vent by a *Paracenteſis*; if in the Breaſt, by opening the interval between the fifth and ſixth Ribs (reckoning downwards;) if in the Brain, by a Trepanation. All theſe Operations are both proper and ſafe, if they be perform'd betimes, and not put off till the Patient's ſtrength be exhauſted, or the Matter be alter'd, and render'd unfit for evacuation. If it come by a prick, we inlarge the Orifice of the Wound. If the Perſon be Plethorick, and the Blood be apt to boyl high, or if the Evil was occaſion'd by a Fall or Bruiſe, Bleeding will be requiſit, eſpecially that for Revulſion, according to the Circumſtances of the part.

As for internal Medicines. The first in order are those which dissolve and disengage clotted Blood. Such are the Decoction of Madder in Wine; the Tincture of the lesser Daisies, the Decoction of the Roots, Leaves, and Flowers of Arnic in Ale, the Juice of the Herb Robert, *Sperma Ceti* given to a dram; Castor, the Blood of Goats given to a dram; Sparrow's Dung dissolv'd in Vinegar, Man's Fat melted given to half an ounce; the Herbs, Savin, Ground-Ivy, Hyssop, Chervil, Wormwood, St. *John*'s Wort, &c. The Roots of Angelica, Swallow-wort, Birth-wort, &c. The Seeds of *Carduus Benedictus*, Chervil, and St. *John*'s Wort; the vulnerary Tinctures, Bezoar Stone, Diaphoretic Antimony, and in a word all absorbent Powders, especially Crabs Eyes dissolv'd in Vinegar. These Ingredients ought always to be mix'd with evacuating Medicines, that so the Blood when dissolv'd may be readily voided. Thus if it be lodg'd in the Abdomen, or if Nature incline to void it by Stool, we add Rhubarb and Laxatives; if in the Breast, we add Diuretics and Diaphoretics pursuant to Nature's Motions. In general, Diuretics are the most proper. The Forms of Receipts are as follows.

Take of the Decoction of Ground-Ivy, a pound; while 'tis yet warm infuse in it over Night Rhubarb, one ounce; pick'd Senna-leaves, half an ounce; Salt of Tartar, half a dram. In the Morning strain the Liquor, and add of the Powder of Crabs-Eyes, a dram and a half; the Powder against Falls (prescrib'd in the *Ausberg* Dispensatory) a dram. Sweeten it with the Syrup of Ground-Ivy; and exhibit a Draught now and then.

Take of the Powder of Crabs-Eyes, *Sperma Ceti*, and Blood of Goats, of each half a dram. Mix for two Doses to be taken in Vinegar. Note, Vinegar renders the Crabs-Eyes very Diuretic.

Take of Chervil-water, three ounces; Vinegar of Wine, an ounce; prepar'd Crab-Eyes, a dram; Diaphoretic Antimony, a scruple; Syrup of Ground-Ivy, six drams; Mix for two Doses. If the Head be bruis'd, or Convulsions be fear'd, add half a dram of the Cinnabar of Antimony. Myrrh, *Laudanum Opiatum*, Spirit of *Sal-Armoniac*, Spirit of Treacle camphoris'd, Poppy-flower-water, volatil Salt of Amber, Essence of St. *John*'s Wort, and the vulnerary Essences may be added by turns.

Having dispatch'd the Cure of clotted Blood, which for the most part degenerats into *Empyema's*, we proceed to that of an

Em-

Empyema it self, which consists in evacuating the purulent Matter, qualifying its sharpness, and strengthening the Part. The Means for evacuation are either Natural or Artificial; the latter are mention'd above. The former are either Urine, Sweat, Stool or Spitting. *Empyema's* of the Breast, (which may serve for a Pattern for all others, as to the Cure) for the most part empty themselves, by Spitting and Urine, tho' the Passages, thro' which the Matter reaches either the Mouth or the Reins, are yet undiscover'd. However 'tis a Physician's part, when he descries purulent Urine, to exhibit Diuretics; and when the Matter moves upwards, and provokes Coughing, to administer expectorating Medicines, or rather a Vomit, which is of wonderful efficacy; supposing still that there be no danger of a spitting of Blood, for in that case it ought to be omitted, and shifted for expectorating Medicines, temper'd according as the Matter is sharp or thick. As for the sharpness of the Matter, 'tis admirably accounted for by exhibiting the Flowers and Balsam of Sulphur, Balsam of *Peru*, Myrrh, and fix'd Antimonial Sulphurs, such as Diaphoretic Antimony, *Poterius's* Antihectic, *&c.* The Injuries done to the solid Parts by the purulent Matter, are repair'd by Goats Milk, and by the Decoctions of Woods, Scabious, Chervil, and especially Ground-Ivy. But Vulnerary or Balmy Medicines are not to be exhibited without such as evacuate one way or another, nor without a particular regard to the Fever that accompanies this Distemper. As for Example,

Take of Hyssop and Scabious-water, of each an ounce and a half; the Flowers of Sulphur, half a dram; Diaphoretic Antimony, a scruple; Jovial Bezoar, half a scruple; Syrup of Tobacco, an ounce. Make a Potion for two Doses. To which, if the Fever be high, add a few Drops of the dulcify'd Spirit of Nitre.

Take of red Poppy-water, three ounces; Vinegar of Wine, six drams; prepar'd Crabs-Eyes, a dram; Diaphoretic Antimony, half a dram; Syrup of red Poppy-flowers, six drams. Make a Potion to be given by Spoonfuls.

Take of the Juice of Ground-Ivy, four ounces; the Juice of Hore-hound, two ounces. With Sugar make a Syrup; to which add of Frankincense and choice Myrrh, of each a dram. Mix, *&c.* The Decoction of China-roots, mix'd with Diaphoretic Antimony; or that of Guajacum, with the Juice of Ground-Ivy; or that of Ox-bones, with the Gelly of Hartshorn, are also very proper. The hot Bal-

ſams may be mix'd with Sugar of Lead when Heat prevails.

Take of the Shavings of Guajacum, an ounce; Saſſafras, half an ounce; boil them in ſeven Pound of common Water, till a Pound and a half be conſum'd. Then add Ground-Ivy, Flowers of St. *John*'s Wort, and the Herb Speedwell, of each two handfuls; Liquorice-roots, half an ounce; Fennel-ſeed, ſix drams; Currans bruis'd, three ounces. Boil all till a Pound and a half more be conſum'd. Strain the Decoction, and exhibit a Draught thrice a Day.

CHAP. III.

Of Bleeding, or the Burſting of the Blood-Veſſels.

THe ſtagnation of the Blood in its own Veſſels, and its extravaſation in the Cavities of the Body, being already diſpatch'd; it remains now to account for its effuſion out of the Body. The Cauſes of which are, either

1. An *Anaſtomoſis*, or ſpontaneous diſ-joining of the Capillary Veſſels, and eſpecially of the Arteries, whoſe Blood in all natural Bleedings runs by Drops, as depending upon the ſucceſſive Pulſation of the Artery; whereas that of the Veins (which, for the moſt part, never burſt without a violent cauſe) runs with a conſtant and united Stream.

2. A *Diæreſis*, or Breaches violently made in the Veſſels, by external cutting, pricking, or bruiſing Inſtruments; by Coughing, Neeſing, Vomiting, or Crying; by exceſſive Joy, Grief, and vehement Paſſions of the Mind, eſpecially in the Flux of the Terms; by the Aſſumption or Inſpiration of ſharp corroſive things; ſuch as Hellebor, violent Purgatives, Suppoſitories, *&c.* and laſtly, by ſharp corroſive Humors incorporated with the Blood, which both fret the Blood, and gnaw its Veſſels, eſpecially in ſcorbutical Conſtitutions, the Fibres of whoſe Veſſels are lank and weak. Some Authors aſſign yet a third Cauſe of Bleeding, *viz.* A Διαπήδησις, or the *Tranſudation* of the Blood thro' its Veſſels; but 'tis not accountable, that any Liquor ſo thick as Blood ſhould ſweat thro' the ſtrong tough Coats of the Veſſels, eſpecially thoſe of the Arteries, without a breach or *Anaſtomoſis*. 'Tis true, the thin Serum may glide thro' ſometimes; but the Conſiſtence of the Blood robs it of that Priviledge.

The

The remote Causes of an *Anastomosis*, are,

1. A true Plethora or redundancy of Blood, as in the suppression of the Terms, *&c.*

2. An apparent Plethora, or the Ebullition of the Blood, obliging it to distend its Vessels, as in Fevers, and the Small Pox, or when Persons drink much Generous Wine, or eat Aromatic Food, or imploy themselves in any extraordinary Exercise of the Body. This Ebullition is most apt to cause a bursting of the Vessels in fat Persons, by reason that their Vessels are straiten'd by the incumbent Fat.

3. The thinness and serosity of the Blood; which at once unbends the Fibres, and qualifies the Blood for making a Passage thro' 'em. In this case the Blood, when it runs out, appears thin and pale, whereas in other cases 'tis brisk and florid. This serosity of the Blood was by the Ancients charged to the Liver, as being tardy in its Office of Sanguification; but as our later Anatomists have justly imploy'd the Liver for other uses, so the imperfect Digestion in the Stomach, and fermentation of the Chyle in the *Duodenum*, will naturally account for the want of consistence in the Blood.

4. The Convulsive Contractions of the Coats of the Vessels, especially the Arteries, which by straitening one Branch, occasion the extraordinary distention of the next. Thus splenetic Persons are liable to a vomiting of Blood, because the Artery in the Spleen denies a free admission to the Blood; and the obstruction of the Blood in the Head is frequently remov'd by bleeding at Nose.

5. The Convulsive Contraction of the Parts, incompassing the Blood-Vessels, which are apt to straiten the Vessels, especially the Veins, that are least able to resist their force.

Critical and customary Effusions of Blood, or such as follow the suppression of a wonted Evacuation, are not to be stopp'd, without they exceed measure. When a Bleeding is attended by a sensible Pulsation of some adjacent Artery, 'tis a sign that it proceeds from the Compression or Contraction of that Artery. Bleedings at Nose are usher'd in by a giddiness, redness of the Eyes, involuntary Tears, tingling of the Ears, itching of the Nose, a hard Pulse, a violent Pain and sensible Pulsation of the Arteries in the Head and Neck. A Flux of Blood from the Wiud-pipe is introduc'd by a Cough, and difficult Respiration. That from the Womb, by the distention, weight, and heat of the Abdomen and Loins, happening about the menstrual Period; and that from the Hæmorrhoid-Veins, by a Pulsation in the Hypocondria, Back,

and Loins, and a Tumor and Pain in the Veins, with a *Teneſmus*.

As for the Prognoſtic, a *Diæreſis* is worſe than an *Anaſtomoſis*; and Bleedings from external Cauſes, are more favourable than thoſe from internal. In Melancholic and Phlegmatic Conſtitutions, eſpecially when the Bleeding renders the Face Limon-colour'd, or is follow'd by Convulſions and Swoonings, it prognoſticates Dropſies, Conſumptions, &c.

As for Cure: The various Cauſes muſt be remov'd by proper Medicines; a *Plæthora* by Bleeding, Scarifying, and a thin Diet: The Ebullition of the Blood by ſuch Med'cines as temper a volatil Acid, namely Vinegar, Spirit of Vitriol, Nitre diſſolv'd in Water; the Tincture of the Flowers of Daſies, the Sugar of Lead, the Antiphthiſical Tincture, Coral, ſeal'd Earth, Purſlain, Plantain, Opium, Camphyr, &c. The ſeroſity of the Blood by thickening Ingredients, and ſuch as evacuate Serum, either by Stool, Urine, or Sweat. The Convulſive Contractions of the Blood-Veſſels by Chalybeats. The ſharpneſs of the Blood, by temperat Medicines, ſuch as Milk, Raiſins, Steel, &c. The corroſion of the Veſſels, by vulnerary Aſtringents: The laxity of the Parts, by corroborating Med'cines, ſuch as Aſs-Dung, the Ankle of a Hog; *Crollius* his Powder, call'd *Sperniola*; Opium, Steel, &c. However, we ought to obſerve,

1. That Blood-letting is only proper, when the Blood abounds or boils too high, and 'tis better to bleed often, for *Revulſion*, *Derivation* and *Averſion*, than to draw forth much at once. Sometimes Ligatures and Cupping-Glaſſes applied at a convenient diſtance from the Part, are not amiſs.

2. That Purgatives are only proper when the Blood is too ſerous; and in that caſe, eſpecially if it be accompanied by a Fever, Diaphoretics mix'd with Opiats are of good uſe; as being apt to thicken the Blood after the Swelling is over, tho' in the time of ſweating they rather attenuate and diſſolve it.

3. Opiats are good in all caſes.

From theſe Premiſes we infer, that the internal Medicines that are proper againſt Bleeding, are the vulnerary Aſtringents, abſorbent Powders, (eſpecially Steel, which is both Aſtringent and Anti-acid to a notable Degree;) Diuretics and Purgatives in ſerous Caſes, and temperat Ingredients, eſpecially Raiſins, and Milk, for mitigating the ſharp Humours. The Med'cines which jointly anſwer theſe ends, are either of the Vegetable, Mineral, or Animal Families. Thoſe of the Vege-

Vegetable Province are Plantan, Purslain, the Syrups of Comfrey, Ground-Ivy, and Myrtle-berries; the Syrup made of the Juice of the Root of Bastard Acorus with Sugar; the fresh Juice of the common stinging Nettle, given to two or three ounces; the Moss of Man's Skull given to a scruple, or half a dram, in the Water of Shepherds Purse, with the Syrup of Co[illegible] Mastic, Sarcocol, Amber, Frankincense, Raisins, Camphyr, Opium, and Rhubarb, which not only evacuats the Serum, but corrects the Crasis of the Blood. Dragon's Blood, if it be Genuin, is very proper; but since 'tis generally adulterated with some noxious Stuff, we ought to avoid it.

The Mineral Province presents us with Coral, Bole Armenic, Nitre, Spirit of Vitriol, Sugar of Lead, the Powder of Blood-stone mix'd with Vinegar or the Juice of Pomgranats, the Vitriol of Steel mix'd with Sugar of Lead, *Hartman*'s astringent Extract of Steel given to nine grains; the Spaw-waters, or, in want of them, the solar Liquor of Steel; and above all, the Tincture of the Sulphur of Vitriol prepar'd thus:

Take the Native Genuin Vitriol of Steel that's void of all Copper, and dissolve it in Water, (if the Vitriol be not Genuin, put the Filings of Steel into the Water, and 'twill precipitat the Copper; and then the strain'd Liquor being thicken'd, will yield the Genuin Vitriol of Steel) when the Vitriol is dissolv'd in Water, pour into it the Oyl of Tartar *per Deliquium*, or the Lie of the Salt of Tartar, and 'twill precipitat an astringent Crocus of Steel, which ought to be frequently dulcifi'd with Water, and dry'd, and then dissolv'd in the Spirit of Nitre; and after the Spirit of Nitre is drawn off, the *Caput Mortuum* digested with rectifi'd Spirit of Wine gives the Tincture, which is of admirable use against all Bleedings. Its Dose is thirty or forty Drops in a convenient Vehicle.

The Animal Province affords us burnt Harts-horn, Unicorns-horn, the Powder of green Frogs, the Water of Frogs-spawn, *Crollius*'s *Sperniola*, given to fifteen Grains; the Juice of Asses and Hogs Dung, mix'd with the Juice of Nettles, or with Sugar in the form of a Syrup, or their Powders, with the Powder of the Dung of a Dog that's wont to gnaw Bones; and the Powder of the Blood that comes forth in Bleeding, it being dry'd and given to a Dram in some proper Vehicle. The Forms of Recipe's are as follows.

Take of the Extract of Flowers, (*viz.* of red Roſes, red Poppies, and Daſies infus'd in Water, in order to be ſtrain'd or thicken'd for an Extract) three drams; Ivory and Sea-horſe-teeth, of each half a dram; prepar'd red Coral, a dram; prepar'd Blood-ſtone, two ſcruples; with the Syrup of red Poppies, make an Electuary for allaying the Heat and Turgeſcence of the Blood.

Take of the Pulp of Raiſins, three ounces; choice Rhubarb, and prepar'd red Coral, of each a dram and a half; Ivory prepar'd without Fire, a dram; Sea-horſe-teeth, half a Dram; Extract of Steel prepar'd with the Juice of Apples, three Drams. With the Syrup of red Roſes make an Electuary. Of which, take the quantity of a Nutmeg Morning and Evening, for correcting the ſerofity of the Blood.

Take of Plantan-water, three ounces; Cinnamon-water, three drams; Vinegar of Wine, half an ounce; aſtringent Crocus of Steel, half a dram; ſeal'd Earth, a ſcruple; *Laudanum Opiatum*, three grains; Syrup of Myrtles, three drams. Mix, and exhibit a ſpoonful or two frequently, for correcting the ſharpneſs of the Blood and Humours. For the Bleedings in Malignant Fevers, we add Alexipharmacal Ingredients. If a Bleeding be caus'd by *Cantharides*, we exhibit Milk and the Decoctions of Raiſins, Iſinglaſs, and Miſletoe of the Oak, with Gum-Arabic, Tragacanth, *&c.*

Take of the Juice of Freſh-Aſſes Dung, Syrup of Purſlain, and that of Myrtle-Berries, of each half an ounce; Plantan-water, an Ounce. Mix for a Draught.

After the Bleeding is thus ſtopp'd, we exhibit ſuch Medicines as diſſolve and evacuat clotted Blood, eſpecially if it proceeded from an internal Part. In the mean while, we uſe likewiſe external Medicines, *viz.* Such as either cement the Veſſels by their gluy Vertue, as the Whites of Eggs, Maſtic, Aloe, Beans, and a living Pigeon or Hen cut up and applied to the Part, whoſe Blood curdles upon the Orifice of the Veſſels, and ſhuts 'em; or ſuch as wring the Veſſels by their auſterity; or imbibe the Blood and ſtick cloſe to the Orifices; of the former ſort are Vitriol, Vinegar, *&c.* Of the latter are Bole-Armenic, ſeal'd Earth, Allum, Potters-Clay mix'd with Vinegar, *&c.* In general, the French Styptic Liquor, (which is nothing elſe but the ſolution of Allum, and half its quantity of the Vitriol of Steel in a proper Vehicle) *Tulpius*'s compound Powder of Bole-Armenic, Quicklime, burnt Vitriol, burnt Allum, Blood-ſtone, Aloes, Dragons-Blood, *Lemnian*-Earth, Crocus of Steel, Mummy, Maſtic and Frankin-

Frankincense; these I say are generally approv'd for external use in all Bleedings.

ART. I.

Of Bleeding at the Nose and Gums.

THE small Arteries inserted into the Membrane of the Nostrils are liable to frequent Bleedings, by reason of a prevailing Moisture that relaxates 'em. The Symptoms and Causes of this Bleeding are related above. If it be very copious, and unwonted, or unseasonable, it prognosticates the Disorders of the Spirits; in acute Diseases, especially about the height, 'tis an ill Omen; but in the beginning of the small Pox, or when it follows a Deafness after the height of a Fever, 'tis not ill. In the Disorders of the Liver or Spleen, if the Nostril of the same side with the Part affected void Blood, 'tis well; if that of the opposit side, 'tis a bad Symptom, according to *Hippocrates*.

In regulating the Method of Cure, we must have a particular regard to the various Causes, *viz.* the redundany, turgescence, serosity, or sharpness of the Blood; and single out proper Medicines, according to the Directions given for Bleedings in general. To which we shall only add this one Observation, that in habitual Bleedings at Nose, fresh Mint, or its Juice taken frequently, is of singular use.

Externally we endeavour to divert and appease the Spirits, to curb the turgescence of the Blood, and to shut the Orifices of the Vessels. For compassing the first Design, we use painful Ligatures, Frights, Caustics apply'd to the remote Parts, cold Things suddenly apply'd to the *Scrotum* or Breast; a dry'd Toad hung under the Armpits, or tied to the Forehead, or its Powder apply'd to the Nostrils; a Blood-stone, or genuin Jasper, held in the Hand till it become warm; Ash-wood apply'd to the Nostrils, *&c.* For the second End, we sometimes bleed by way of Revulsion and Derivation; or apply scarifying Cupping-Glasses to the Neck, or to the Calf of the Leg; those which the Ancients order'd for the Liver and Spleen, being very dangerous and of no use. Cataplasms of Fullers Earth, and Vinegar, and Epithema's of the Juice of House-leek, Vinegar, Nitre, and Camphyr; or of Soot, Vinegar, and the Whites of Eggs; or of Allum, Frogs Spawn, and Vinegar, being applied to the Fore-head, Temples, Crown of the Head, Nape

Nape of the Neck, *Scrotum* in Men, and the Breasts in Women, are of admirable efficacy for appeasing the tumultuous Motions of the Blood. As for the third Indication of shutting the Orifices of the Vessels, we blow into the Nostrils the Powder of Allum or Vitriol, mix'd with Painters *Lac*, or apply it with a Tent dipp'd into the White of an Egg; or into the Juice of Hogs-Dung, mix'd with the Juice of Plantan. The Powder of Hogs-Dung, and that of Toads, are very proper for the same use; as likewise the Phlegm of Vitriol, writing Ink, the Tincture of the Sulphur of Vitriol; Soot taken from the bottom of a Kettle, and mix'd with the Powder of the Blood that runs from the Nostrils; the *French* Styptic Liquor, or a Solution of Allum and Vitriol of Steel in Plantan-water, and above all, the rectifi'd Spirit of Wine.

The Gums are also very liable to Bleedings, occasion'd by the Laxity of their Substance, or the Corrosion of sharp scorbutical Spittle, or the drawing of a Tooth, or by the general Causes of other Bleedings. If their bleeding be periodical, customary, or critical, it ought not to be stopp'd. If it be caus'd by the drawing of a Tooth, apply the Tincture of the Sulphur of Vitriol with Cotton; and gargle the Mouth with the Decoction of Tormentil and Snake-weed-roots, with Galls and white Poppy-seeds, in Water, mixing it with Bole-Armenic, Allum, and a little Vinegar. Sometimes the Spirit of Salt mix'd with Water is useful for washing the Mouth. But when every other thing proves ineffectual, an actual Cautery is the surest Remedy. Scorbutical Bleedings are accounted for elsewhere.

ART. II.

Of a Spitting of Blood.

THe Blood that is evacuated by Spitting, may either proceed from the Stomach, (of which elsewhere) or from the Palat, Nostrils, and Gums, as I intimated in the last Article; or from the Organs of Respiration, *viz.* the Wind-pipe, Bronchia or Lungs; in which case, the Disease is called κατ' ἐξοχὴν, *Hæmoptysis*, or a Spitting of Blood, and is the Subject of this Paragraph. The general Causes are already mention'd: The particular Causes are,

1. The Rupture of some Vessel in the Breast, occasion'd by a redundancy of Blood, suppression of the Terms or Piles, violent

ent Crying, bearing heavy Burdens, Falls, Blows, vehement Coughing, or immoderat Laughter.

2. The Corrosion of the Vessels in the Breast, especially in the Lungs, occasion'd by the inspiration of mineral sulphureous Steams; or by a sharp Lymph reigning in the Body, as in the small Pox, or when a sordid Ulcer is unseasonably dry'd. To these we may add the accidental swallowing of Leeches, and immoderat Bathing.

A Spitting of Blood is of it self manifest: But to trace out the Part from whence it proceeds is a piece of difficulty. For this end the Physician ought to weigh the antecedent Causes, such as excessive Crying, Falls, Bruises of the Breast, and violent Coughs, which generally arraign the Lungs, while other Causes are apt to affect other Parts. Besides, the Circumstances attending the Evacuation, will give some further Light into the Matter; as if the Blood be clotty, if it be voided without Coughing or much Hauking, and that in small quantities, then it proceeds from the Palate, Gums, Throat, *&c.* and not from the Breast; if it be copiously voided with a Cough that not only accompanies but precedes the evacuation, and makes a hollow Noise, then it comes from the Wind-pipe or Lungs; and if the Respiration be difficult, if the Blood be florid, thin, and frothy, (as being rarify'd by the Air) and if a Pain beset the lower part of the Breast, it certainly takes its rise from the Lungs. If the Blood be black, clotty, and thick, and voided with a Cough and hollow Noise, it springs from the Veins in the Cavity of the Breast. As for the Prognostic; A Spitting of Blood from the Lungs is most dangerous, and apt to degenerat into a Phthisic or Ulcer of the Lungs, especially if it took its rise from the corrosion of a sharp Humor. If it be only a Symptom of another Disease, as of a Pleurisie, *Peripneumonia*, &c. it is not so dangerous, as when it stands upon its own Legs. If a Spitting of Blood, occasion'd by a Suppression of wonted Evacuations, or by the Turgescence of Blood, be unseasonably stopp'd, it degenerats into a *Peripneumonia*, or a Consumption.

The Cure is perform'd in the Paroxysm, by removing the Cause, appeasing and thickening the Blood, and repairing the Losses of the Vessels: out of the Paroxysm, the clotty Blood remaining in the Breast, ought to be discuss'd, and the Lungs strengthen'd. Now in order to answer these Indications, let's mind the following Rules.

1. When

1. When a Spitting of Blood is caus'd by the Corroſion of ſharp Humors, Blood-letting is improper; in ſome other caſes it may be ſervicable, but regard muſt ſtill be had to the Rules of Revulſion and Averſion; as if it proceed from the ſuppreſſion of the Piles or Terms, a Vein muſt be open'd in the Leg; When it ariſes from the ſuppreſſion of a cuſtomary bleeding at Noſe, the Vein of the Fore-head, or that under the Tongue is the proper place.

2. Purgatives are highly pernicious; but Diuretics and Diaphoretics are very uſeful.

3. Internal Aſtringents ought not to be us'd, before the Blood be turn'd off, for fear of impriſoning the Blood in the Breaſt, and ſo cauſing a Suffocation, or *Peripneumonia*.

4. All external Aſtringents and cold Things applied to the Breaſt, are more apt to inflame than mitigat the Diſeaſe.

5. Opiats are always ſafe and uſeful; but ſuch of 'em as are very hot, *viz.* Venice-Treacle, Mithridat, *&c.* are not ſo proper as *Laudanum Opiatum*, and eſpecially Henbane-ſeeds, which are unanimouſly approv'd both by the ancient and modern Writers. Hence an Electuary of Henbane and white Poppy-ſeeds, with Coral, Blood-ſtone, and the ſtale Conſerve of Roſes, is of excellent uſe. However the ſafeſt way is to give but a ſmall quantity of Henbane-ſeeds at a time, and repeat the Doſes oftner, becauſe they are very Narcotic, and apt to cauſe Madneſs.

6. In all Compoſitions we ought ſtill to have an Eye upon the corroſive ſharpneſs of the Humors, for the tempering of which we uſe the ſame Medicines as were recommended againſt Bleedings in general; eſpecially Plantan, Purſlain and Comfrey, their Decoctions, Juices and Syrups, for their Waters have no aſtringent force: The Decoction, Syrup, and Conſerve of Ground-Ivy, (a noble Pectoral,) the Juice of Nettles, the ſtale Conſerve of red Roſes, *Diaſcordium*, the Troches of Amber, (which at once qualifie ſharp Humors, diſſolve clotted Blood, and ſtop its Flux:) The Oyl of Linſeed given by Spoonfuls, the Oyl of Vitriol when there's no apprehenſion of a Phthiſic; the Juice expreſs'd from Quinces boyl'd in Water till they be ſoft, given to two or three Spoonfuls, three or four times a Day: the Decoction it ſelf being mix'd with that of Barley, or Currans, for ordinary drinking; Mice-dung, given to a dram, twice a Day, with the Juice of Plantan and Sugar; the Tincture of the Sulphur of Vitriol; Blood-ſtone, the Antiphthiſical Tincture *Mynſichtius*'s Species *Diaplantaginis*, &c.

7. When

7. When the Paroxysm is over, we ought to add dissolving and expectorating Medicines, such as *Sperma Ceti*, Diaphoretic Antimony, Crabs-Eyes with Vinegar, Oyl of Amber, Oxymel of Squills, &c.

8. In the last place the Lungs ought to be fortify'd by vulnerary balmy Medicines.

As for external Applications some apply a dry'd Toad under the Arm-pits; some trust to the Sympathetic Powder of Vitriol; and others choose to wet or wash the Testicles with Rose Vinegar, and that with good success.

Take of the Conserve of Ground-Ivy, and that of Comfrey, of each an ounce; Conserve of Roses, an ounce; seal'd Earth impregnated with Spirit of Vitriol, (provided the Lungs are not corroded) two scruples; prepar'd Bloodstone, a scruple; Troches of Amber, a dram; *Laudanum Opiatum*, six grains. With the Syrup of Comfrey make an Electuary: Of which take the Quantity of a Nutmeg twice a Day.

Take of Plantan, Purslain, an Chervil-waters, of each an ounce; Tincture of the Sulphur of Vitriol, a dram; Troches of Amber, two scruples; *Crollius's Sperniola*, fifteen grains; *Laudanum Opiatum*, five grains; *Fernelius's* Syrup of Comfrey, and the Syrup of Purslain, of each half an ounce. Make a Potion.

The Spaw-waters, Milk, and the vulnerary Decoctions are us'd as Preservatives.

SECT. XIX.

Of Diseases relating to the Alterations of the Blood, in the Spleen, Liver, and Kidneys.

AS the Blood visits the Bowels for their nourishment, so it is variously alter'd according to the Nature of every Bowel. In the Spleen 'tis impregnated with a volatil sour Ferment, that prepares and qualifies its Parts for separation; in the Liver 'tis separated from the Bile, which is convey'd thence into the Colon, either directly thro' the *Ductus Hepaticus*, or, after some stay in the Gall-bag, thro' the *Ductus Cysticus*. Now there are several Cases in which this separation

tion is lamely perform'd, *viz.* When the Animal Spirits are exhauſted or diſorder'd, or the Innate Spirits of the reſpective Bowel vitiated; or when Inflammations or Tumors invade the Part, as in Chronical Diſeaſes; not, as if the Obſtructions or Tumors of the Spleen or Liver were the Cauſes of Chronical Diſtempers, but only as being their Effects, or at leaſt troubleſome Companions, that ought to be accounted for in the Cure of thoſe Diſtempers, it being generally compaſs'd by Chalybeats, or ſuch Medicines as conquer an Acid, and clear the firſt Paſſages, which are the original Source of all Obſtructions.

In the Kidneys, the Blood being carry'd thither by the *Emulgent* Arteries, is diſſolv'd by a lixivious Ferment, and its Serum laden with acid and urinous Salts, invelop'd with oily Particles, is ſtrain'd thro' the ſmall Fibres that convey it to the *Corpus Papillare*, from whence it ſweats thro' into the *Pelvis*, and paſſing thro' the Ureters and Bladder, is voided under the Name of *Urine*. If the Salts of the Urine be exactly united together, they entitle it to tranſparency; if their mixture be unequal, it is muddy or crude, and betokens the unequal temperature of the Salts in the Blood. But ſo ſoon as the Blood has conquer'd the prevailing heterogeneous Salt that over-match'd and diſturb'd the Harmony of the reſt, then the Urine precipitates 'em as a Sediment, and becomes clear. In perfect Health, it contains nothing but theſe Salts incorporated with Oyl and a ſerous Vehicle, but when the Chyle is not elaborat or perfectly digeſted, then its Crudities, and the ſulphureous vicious Salts occaſion'd by them, are voided with the Serum, and impart to it a high or flat Tincture, according to the various Exaltation of the Salts, and their mixture with Sulphur.

CHAP.

CHAP. I.

Of Distempers relating to the Separation of Serum *in the Kidneys.*

ART. I.

Of an Ischuria *in the Kidneys, or a Suppression of Urine arising from the want of a due Separation in the Reins.*

THE Causes of an *Ischuria* in the Kidneys relate either to the Blood or the Kidneys. The former are the Redundancy of the Blood, or its vicious thickness and the close cohesion of its Parts, occasion'd by acid or viscous Lymph, and an imperfect Fermentation, as in Fevers before the height, in chronical Diseases, Obstructions of the Bowels, &c. The latter relating to the Kidneys are,

1. The Obstruction of their Passages, occasion'd by clotted Blood, as in the case of a Fall; Purulent Matter either residing there, or convey'd thither from other Ulcers; viscid tough Humors, a Stone in the Kidneys, external Cold contracting the Fibres, nephritic Tumors, &c.

2. The Paralytic Laxity of the Fibres, occasion'd by a weakness or deficiency of Spirits, by preceding Wounds or Ulcers, by the disorders of their Nerves, the dislocation of the *Vertebræ* of the Back, &c.

3. The convulsive Contractions of the Fibres, which are frequently occasion'd in one Kidney by a Stone in the other, thro' the correspondence of the Nerves.

4. The flatness of the Ferment in the Kidneys, or its degeneracy from a volatil salin Acrimony, as in Dropsies, Cachexies, &c.

A Suppression of Urine arising from the Disorder of the Kidneys is distinguish'd from that in the Bladder, by a sense of weight about the Loyns, the insufficiency of a *Catheter* for procuring Urine, and the absence of a Tumor or Pain about the Pubes or *Perinæum*; sometimes 'tis attended by stinking Sweats, or such as smell like Urine; a stinking Breath, Anxieties in the Breast, Vomiting, an universal Numness, Epileptic Symptoms, and Tumors of the Abdomen and Legs. If the Urine before the suppression was thick

thick and muddy, with a copious ſlimy Sediment, the Body being univerſally infeſted with tough groſs Humors, then the ſuppreſſion is caus'd by Slime ſtopping the Paſſages. If the Urine before the ſuppreſſion was bloody, or if a Blow, Fall, or violent Riding occaſion'd it, then clotted Blood is the immediate Cauſe. If the Urine was mix'd with Purulent Matter, or if any conſiderable Bowel be ulcerated, the Obſtruction is caus'd by the corrupt Matter. If the Urine was voided without any other remarkable Symptom, than that of loſing its wonted Smell and Taſte, the Ferment is faulty.

An *Iſchuria* in the Kidneys is worſe than that in the Bladder. If it be attended by Symptoms diſturbing the Breaſt, 'tis very dangerous. If the Urine force its Paſſage before the *Seventh* Day, it affords a comfortable Prediction, tho' not infallible, eſpecially if the Blood and ſolid Parts be much corrupted: Some Inſtances there are of a total ſuppreſſion of Urine, for ten, fourteen, or twenty Days, that was cur'd; but theſe are unfrequent; beſides, they are generally attended by a perpetual Sweating, Vomiting, or ſome notable Evacuation of Serum, otherwiſe they would prove mortal. If a ſuppreſſion of Urine be free from pain, it proceeds from the Paralytic Laxity of the Fibres, and is always mortal.

The Cure varies according to the Difference of the Cauſes. In general, gentle Laxatives mix'd with Diuretics and Turpentin Clyſters are proper, as being apt not only to irritate the Guts, but to promote Urine. If the Obſtruction be caus'd by clotty Blood; Madder, *Sperma Ceti*, Crabs-Eyes mix'd with Vinegar, Chervil, Ground-Ivy, St. *John*'s Wort, eſpecially its Seed, and above all the volatil Salt of Amber, are proper Ingredients. If the Obſtruction be occaſion'd by Purulent Matter, we exhibit the Balſam of Sulphur prepar'd with Oyl of Turpentin, the Eſſence of Agrimony, Juice of Ground-Ivy, and ſuch like vulnerary Medicines. If a ſlimy Humor beſet the Kidneys, we muſt firſt evacuate the ſlimy Crudities by Laxatives, before we attempt to uſe Diuretics, for fear they ſhould augment the Evil, by cauſing a greater afflux of pituitous Matter. After evacuation we adminiſter the Juice of Rhadiſhes, the Infuſion of Horſe-Rhadiſhes in Wine, the Juice of Limons to two or three ounces, with Oxymel; the dulcify'd Spirit of Salt, the philoſophical Spirit of Vitriol, or rather the acid Spirit of *Sal-Armoniac*, with the Decoction of Parſley-roots and

and red Vetches; the Juice of the Pellitory that grows upon the Rubbish of old Walls, as being impregnated with the nitrous Salt of the Lime; the Winter-Cherry, Madder, volatil Salt of Amber, &c. If the Fibres of the Kidneys be flaggy, Aromatic and Nervous Medicines are proper, especially Turpentin, the Spirit and Oyl of Juniper-berries, Cinnabar of Antimony, and above all the volatil Salt of Amber given to twelve grains in a convenient Vehicle is an admirable Diuretic. If the Fibres be contracted we exhibit Narcotics, with Cinnabar of Antimony, and the volatil Salt of Amber; or Mithridat with some diuretic Decoction; or, in imitation of *Gesnerus*, the Powder of Glass.

If the Ferment of the Kidneys be defective, we exhibit the sharp salin Diuretics, mix'd with the temperat oily Ingredients; especially the Decoction of Garlic-Heads, the Seed of Hedge-Mustard given to a dram in Wine, the Juice of Parsneps, the Spirit and Salt of Urine; *Amelungius*'s nephritic Tincture, prepar'd from Tartar, Nitre, Antimony, and the solar Flint-stones; the carminative Spirit, the volatil Spirit of Tartar; the Spirit of *Sal-Armoniac*, the volatil Salt or distill'd Oyl of Amber; the Spirit or Juice of Earth-worms; the Powder, Juice and Infusion of Wood-lice; the Infusion of *Spanish* Flies in Wine, or their diuretic Essence prepar'd with the Tincture of Tartar; the Infusion of Horses Dung in Rhenish Wine; the Urine of a Goat; Crabs Eyes mix'd with Wine or Vinegar; the Decoctions of red Vetches, Chervil, Madder, or St. *John*'s-wort; the Shells of Hens Eggs or rather those of Ostrich Eggs, given to a dram, or dissolv'd in Spirit of Salt; the Powder of Snails Shells, dissolv'd in like manner; the fix'd Salts of diuretic Plants, prepar'd according to *Tachenius*'s Method; or so that they be not too much calcin'd, and consequently robb'd of their saline Vertue; the Tincture of Tartar, prepar'd thus:

Take of the Salt of Tartar, two ounces; dissolve 'em in Water, then strain, and set it upon the Fire; while 'tis a boyling, throw into it by degrees three ounces of the Cream of Tartar in Powder; then thicken 'em with a gentle Fire, and afterwards reduce 'em to Powder, from which extract an admirable Diuretic Tincture with the Spirit of Wine.

To these we may add the Juice of the Birch-tree, the distill'd Oyl of Turpentin, and Emulsions made of Violet-seeds, and Speedwell-water, or of Turpentin and the Yelk of an Egg, with some Diuretic Water, and the Juice of Limons. Or,

Take of the Waters of Stone-Parſley, and Reſtharrow, of each an ounce; Elixir of Juniper-berries, (call'd *Malvaticum*) ſix drams; Spirit of putrified Earth-worms, two drams; volatil Spirit of Tartar, a dram; diſtill'd Oyl of Turpentin, three drops; Syrup of Ground-Ivy, two or three drams. Mix and exhibit a Spoonful now and then.

Take of Tartar vitriolated, a dram; of the Salt of Bean-ſtalks, and Salt of Pigeons Dung, of each fifteen grains; volatil Salt of Amber, twelve grains. Make a Powder for three Doſes.

Externally we anoint with Stone Oyl, Oyl of Scorpions, and diſtill'd Oyl of Turpentin, mix'd with the Ointment of Marſh-mallows.

ART. II.

Of the Stone in the Kidneys.

STones in Man's Body, are nothing elſe but a vicious Acid congeal'd with a volatil Alcali. This vicious Acid, for the moſt part, is bred in the Stomach, and being mix'd with the Blood, attacks a naked volatil Alcali where-ever it meets it, with which it conſpires to make up a third Concrete or Stone. Now the Kidneys being plentifully ſtock'd with a volatil Alkali, are moſt liable to the ſhocks of this Acid. 'Tis true, that in a healthy ſtate, the Alcali of the Urine in the Kidneys, is naturally qualifi'd with an Acid, and then 'tis ſecure from the Efforts of the vicious Intruder; but for as much as the Urine is oft-times lihable to alteration, or corruption, which ſets the volatil Salt at liberty, much after the ſame method as when it has been expos'd to the Air in an Urinal and begins to ſmell; therefore the Kidneys are in ſuch caſes in danger of being moleſted with Stones. Thus the generation of a Stone ſuppoſes two concurring Cauſes; one is a prevailing Acid in the Body, occaſion'd moſtly by imperfect Digeſtions in the firſt Paſſages, or by ſuch things as are apt to become acid; *viz.* Milk, Cheeſe, and eſpecially Wine: The other is the Putrefaction and Liberty of the volatil Alkali of the Urine; occaſion'd generally by the Weakneſs of the Ferment, as by *Aſparagus* and ſuch Diuretics as enfeeble the Ferment, and cauſe a putrid Smell in the Urine.

Now, that a volatil Acid engag'd with the volatil Alcali in the Kidneys is apt to become a Stone, is made out by the the following Remarks.

1. Ar-

1. Arthritick and Melancholick Persons, who are much molested with vicious Acids, are very liable to the Stone; whereas those of a bilious Constitution are commonly free of that inconvenience.

2. Those who live near the *Danube*, and are wont to drink much Wine, are frequently troubled with the Stone, by reason of the prevailing Acid in the Wine, which is apt to congeal with a volatil Alcali; as, if you take Nitre very well fix'd, and mix it with Flint-stones, then melt it upon a strong Fire, 'twill become like Glass; pulverize this Glass, and pour Spirit of Wine upon it; after some time, pour that off, and add fresh Spirit of Wine, which in a Month's time will become a red Oil, containing the Acid of the Nitre exalted with the Spirit of Wine. Now if you put a few Drops of this volatil acid Oil into a Glass of Wine, 'twill gather it into a hard substance.

3. The chymical Analysis of the Stones presents us with a fetid Oil, an urinous Spirit, a volatil Salt, and a *Caput mortuum*, like Quick-lime: Not to speak of its effervescence with any alcalin Salt.

When the Stones thus ingendered of the volatil Acid and Alcali are growing together, they sometimes take in a viscid Mucilage, being the deprav'd Nourishment of the Kidneys, which renders the Stones white: sometimes they corrode the small Vessels, and take in some Drops of Blood, which makes the Stones red: sometimes the pure Salts join together, without any other mixture but some earthy Particles, caus'd by the Putrefaction of the Urine, and then the Stones are yellow. But at other times the Membranes, and the whole substance of the Kidney, make a part of the Concrete.

A Stone in the Kidneys, while it lies quiet and does not stir, is attended by few or no Symptoms. But when it begins to move, or, as the Practitioners speak, *in the Paroxysm*, it grates upon the Membranes, which by means of the immediat Correspondence of their Nerves with all those from the *Mesenteric Plexus*, communicat their Disorder to all the adjacent Parts. When its Motion in the Kidney first commences, the Person is molested with a heavy dull Pain in the Loins, inclining to the right or left side, and sometimes reaching to the respective side of the Head, according as the right or left Kidney is disturb'd. When the Stone is advanc'd from the *Pelvis* to the *Ureter*, then the Pain shoots, pricks, and raises a sense of distention, or tearing, and does not cease

'till it either reaches the Bladder, or retires to the Kidney. Immediately before the invaſion of the Paroxyſm, the Urine is ſcanty, watry, and very ſharp. Sometimes when the Stone is in motion, the nutritious Juice of the membranous Parts being deprav'd, is voided together with the Urine, rendring it thick, pale, and glutinous, eſpecially towards the bottom of the Urinal. Sometimes 'tis high tinctur'd, and thick, as being copiouſly impregnated with diſſolv'd Salts; and ſometimes 'tis actually mix'd with Blood, by reaſon of the Stone's offenſiveneſs to the Blood-Veſſels. Often-times Sand is alſo voided, but then it falls to the bottom, and is hard, not friable; otherwiſe if the Sand be friable and reddiſh, it is only a Coagulation of ſcorbutical Salts: Sometimes the Urine is totally ſuppreſs'd, the other Kidney being contracted by the provok'd Nerves.

During the Paroxyſm, the Perſon is unable to ſtand upright, or bow his Body, and the Pain glides along the Ureters to the Bladder; ſometimes it draws up the Teſticle, and benums the Leg of the ſame ſide; ſometimes it cauſes a vomiting, inappetency, contractions of the Fingers, a tickling Pain in the Nut of the Yard, and difficult reſpiration, the Midriff being by ſympathy affected, and girding the Region of the ſhort Ribs with a ſenſe of conſtriction. But above all, the moſt common Symptoms are, Gripings in the Guts, Colick Pains in Men, Hyſteric Symptoms in Women, and in big-belly'd Women Pains reſembling thoſe of Child-birth. The Pulſe for the moſt part is hard, by reaſon of the convulſive Contractions of the Fibres of the Arteries. All theſe Symptoms are not always to be met with, neither are they peculiar to this Diſeaſe; but thoſe which are moſt certain, and diſtinguiſh this Diſtemper from the Colick, are the benum'dneſs of the Leg, inability to ſtand upright, or to ſtretch the Back, the continuance of the Pain without remiſſion, the diſorders of the Urine, and the abſence of the Symptoms peculiar to the Colick.

A Stone in the Kidneys is a dangerous Diſeaſe, eſpecially to Women with Child. It frequently cauſes mortal Convulſions, Suppreſſions of Urine, Inflammations and Ulcers in the Kidneys, *&c.* eſpecially if it be rough and large. If the Urine, that was at firſt thin, becomes thick and muddy, as being laden with Sand and ſmall Stones, 'tis a good ſign. But if the Urine be ſuppreſs'd for a conſiderable time, and if the external Parts be cold, or ſeiz'd with cold Sweats, Death is at hand. Sometimes the Pains obſerve a

Tertian or *Quartan* period. If they cause a Lethargy 'tis incurable.

The Cure consists in mitigating the Pain, and removing the Contractions of the Ureters and Membranes, and expelling the Stone by Diuretics. For which end, we ought to observe,

1. That all violent Diuretics are improper, while the Pain is vehement; for that they provoke and irritate the Membranes, to contract 'emselves more. Wherefore while the Pain lasts, we give only the most temperate meek Diuretics mix'd with Opiats.

2. That oily things, such as Emulsions, *&c.* are absolutely necessary for allaying the sharpness of the Urine. The Ancients indeed recommended 'em for relaxating the Passages, but 'twas a groundless Fancy: To be sure if they had any relaxating Virtue, they would first display it upon the Stomach.

3. That the first Passages ought always to be kept clear, lest their Impurities should aggravate the Symptoms of the Abdomen. Upon this account, emollient and anodyn Clysters are very serviceable, especially in the beginning of the Paroxysm. Such are those of the Decoction of Speedwell, Camomil-flowers, Marsh-mallow-roots, *&c.* in Milk; or of Rape and Linseed-oyl; but we ought to take notice, that the simplest Decoctions are best; that large quantities must not be injected, especially in high-belly'd Women, for fear of distending the Parts, and aggravating the Pain; and that if the Belly be very costive, we may add purgative Electuaries; and when the Pain is abated, Juniper-berries, volatil Salt of Amber, and such like Diuretics. After the Injection of Clysters, we order Baths and Fomentations of the Decoctions of soft'ning, carminative, cephalic, and diuretic Ingredients; follow'd by emollient relaxating Liniments, sharpen'd with distill'd cephalic and diuretic Oyls. As,

Take of Pellitory, a handful; Mallows and Violets, of each half a handful; Chamomil and Elder-flowers, of each two little handfuls; Marsh-mallow-roots, six drams; boil them in Child's Urine, or Whey. To eight ounces of the strain'd Decoction, add of Turpentin dissolv'd with the Yelk of an Egg, two drams; Oyl of white Lillies, half an ounce; Oyl of Scorpions, a dram; antimonial Nitre, two scruples. Make a Clyster.

Take of the Herbs, Mallows, Marsh-mallows, Pellitory, and Mercury, of each two handfuls; Chamomil and Elder-

flowers; of each two handfuls; Juniper-berries, two ounces; Lin-ſeed and Fenugrec-ſeed, of each three ounces; make two Bags to be boyl'd in Water for a Bath, applying, in the time of bathing, one Bag to the Loyns, and the other to the Navel.

Take of the Ointment of Marſh-mallows, three drams; Oyl of bitter Almonds, and Oyl of Scorpions, of each a dram and a half; Rock-Oyl, two drams. Make a Liniment; with which anoint the Loyns, Navel, and Region of the Ureters.

Take of Rock-Oyl, three drams; expreſs'd Oyl of Poppies, a dram and a half; expreſs'd Oyl of Henbane, half a dram. Make an Anodyn Liniment. The Eſſence of Opium is uſeful for the ſame purpoſe. The nervous Cephalic Oyls, the diſtill'd Oyls of Turpentin, Cummin, &c. are alſo very proper. But above all, the Oyl of Camphyr is an admirable Diuretic for external Compoſitions. The Oyl of Amber is too fierce, and apt to aggravate the Pain.

Take of the Plaiſter call'd *Nervinum*, and *Tacamahac*, of each an ounce; Balſam of *Peru*, two drams. Make a ſquare Plaiſter to be applied to the Loyns.

Take the expreſs'd Juice of ten River-Crabs boyl'd in Milk, and add to it three ounces of the Crum of white Bread, three Yelks of Eggs, an ounce of Butter, an ounce of the Oyl of Chamomil, and half a ſcruple of Saffron. Mix all for a Cataplaſm, to be applied to the Loyns, for allaying the exceſſive Heat of the Kidneys.

While theſe Preſcriptions are in uſe, 'twill be requiſite to look out for internal Med'cines. In the beginning gentle Laxatives are uſeful. They ought to be mix'd with the meekeſt Diuretics. As,

Take of Tartar Vitriolat, fifteen grains; Salt of Broom, three or four grains; Scammony prepar'd with the Juice of Roſes, three grains; diſtill'd Oyl of Turpentin, a drop. Make a Powder to be exhibited in the beginning of the Paroxyſm.

Turpentin is both a Laxative and a Diuretic, and upon that account highly uſeful in this caſe. The Emulſions of Violet-ſeeds with Speedwell-water mix'd with Crabs Eyes, are alſo very proper for the ſame purpoſes.

The firſt Paſſages being clear'd, we exhibit ſuch Medicins as mitigat the Pain, and allay the ſharpneſs of the Humours, with gentle Diuretics. Thus the Elixir of Juniper, mix'd with the Eſſence of Opium, and exhibited by ſpoonfuls: The Oyl of ſweet Almonds mix'd with Pearch-ſtones, and

the

the Syrup of Marsh-mallows: And the Emulsions of temperat Seeds, are very proper. In general, Narcotics are very serviceable, not only by allaying the Pain, but by procuring Sleep, and so strengthening the Spirits in order to the expulsion of the Stone. To these we add the gentle and easie Diuretics. As,

Take of prepar'd Crabs Eyes, *Sperma Ceti*, of each a scruple; volatil Salt of Amber, five grains; *Laudanum Opiatum*, two grains. Make a Powder. Sometimes we add Cinnabar of Antimony, for preventing or removing the Convulsion of the internal Parts.

Take twelve living Wood-Lice; bruise 'em with two drams of the sharpest Tincture of Tartar; then strain it, and add a scruple of the Essence of Opium. Dose thirty or forty drops. The Tincture of the Balsam of *Peru*, or that of *Capivi*, are likewise very proper.

Take of the Extract of Acorus, sixteen grains; Castor, four grains; *Hysteric Laudanum*, six grains; with the Oyl of Turpentin make Pills, to be exhibited when a Vomiting and Hiccough attend the Stone in the Kidneys.

Take of the Water of Straw-berries and Winter-cheeries, of each an ounce and a half; Cinnamon-water, three drams; Crabs-eyes, two scruples; Egg-shells calcin'd, a scruple; purify'd Nitre, half a dram; *Laudanum Opiatum*, two or three grains; Syrup of Marsh-mallows, half an ounce. Make a Potion.

Take of Marsh-mallows-roots, an ounce; Liquorice-roots, two drams; Mallows, one handful; Violet-seeds, half an ounce. Boyl them in Barley-water. To two pound of the strain'd Decoction, add of the Syrup of Poppies, two ounces; prepar'd Crabs-eyes, a dram. Mix, &c. Sometimes we add Juniper-berries, Carrot-seeds, St. *Johns*-wort-seed, &c. *Forestus*'s diuretic Decoction is much approv'd. As also the decoction of Chamomil-flowers, or that of Water-lillies. In every Draught of such Decoctions, 'tis customary to add a few drops of the Spirit of Nitre, or of a mixture of the Spirit of Salt with the volatil Salt of Amber.

When the Symptoms attending the Fit begin to relent, we must have recourse to strong sharp Diuretics: Such are, the Juice of Radishes, given to two ounces with Spanish-wine; the Roots and Leaves of Horse-radishes infus'd in Wine, or a Spirit distill'd from Wine, in which Roots or Leaves of Horse-radishes have been infus'd in a Cellar for fourteen Days together; the Essence of Restharrow; Burdock-seeds; the Infusion

of Ground-Ivy dry'd and Garlic-heads in the Spirit of Wine, or that of Juniper-berries; an Electuary of the Rob of Juniper, and St. *Johns*-wort-ſeeds, which when bruis'd ſmell like Turpentin, and conſequently muſt needs be ſerviceable both for cleanſing the Reins, and preſerving their Ferment by its balmy Virtue; Carrot-ſeeds infus'd in fermenting Ale: The diſtill'd Oyl and volatil Salt of Aſh-tree-ſeeds; or the following Oyl;

Take of the inner Rindes of Aſh-tree-roots, two pound; freſh Juniper-berries, three pound; Turpentin, a pound and a half. Mix all, and digeſt for the ſpace of three Months in twelve pound of Water. Then diſtill an admirable Diuretic Oyl. Doſe, eight or ten drops in white Wine.

The Juice of the Tendrels of the Birch-tree gather'd in *March* is of excellent uſe, if drank like Spaw-waters. As alſo the Water diſtill'd from Arſmart and frequently cohobated; the Decoctions of the Indian nephritic Wood; the Gum of the Cherry-tree form'd into Pills, or diſſolv'd in Wine; and the nephritic Eſſences or Spirits of Winter Cherries, Juniper-berries, *&c.* *Timæus* recommends the Juice of the wild Tanſey gather'd in *May* before the Sun-riſing; and that of green Rye, mixt with red Wine. To theſe we add the volatil Salt of Amber, the Salt of Urine, Nitre, Spirit of Nitre, and all nitrous Salts, eſpecially that of Pigeons Dung; or the Infuſion of Pigeons Dung in Vinegar, mixt with Honey; or the following Salt;

Take Nitre well fix'd, and expoſe it to the Air. 'Twill melt to the conſiſtence of Pap. Then mix it with an equal quantity of the red Oyl of Vitriol. When their Ebullition ceaſes, draw off the Liquor with a ſtrong Fire, and 'twill leave a white Salt, of admirable efficacy againſt the Stone.

The Mineral and Animal Stones are likewiſe recommended in this caſe, eſpecially nephritic Stones, Crabs Eyes, Pearch or Carp Stones, the ſhells of Eggs, eſpecially Oſtrich Eggs. They are not directly Diuretic, but they drink up the Acid that gathers the Stone, and if diſſolv'd in the compound Spirit of Salt are converted into a third Concrete that proves an admirable Diuretic. The Lye of calcin'd Egg-ſhells, and the lixivious Salt of Quick-lime calcin'd with *Sal-Armoniac*, are alſo much approv'd. The Decoction of Quick-lime in Water being ſtrain'd and congeal'd, yields a fix'd Salt, which is either us'd in Powder, or infus'd in rectify'd Spirits, to which it gives a notable red Tincture that's much commended. *Helvetius*

vetius boyl'd Quick-lime in Vinegar, and evaporated the decanted Decoction: The remaining Salt he made red-hot in a Crucible, and extracted a notable nephritic Tincture with Spirit of Wine. The Spirit of putrify'd Earth-worms is also a proper Diuretic; or the Powder of Scorpions, first wash'd, then infus'd alive in Spanish Wine for twenty four Hours, and bak'd in an Oven in a Pot cover'd with Sage-leaves; their Dose is four or five grains in a potch'd Egg. If the Wings, Head and Feet of Crickets be lopp'd off, and its Body be macerated in Parsley-water, 'twill become a milky Liquor that's very diuretic. The Essence of Wrens is much applauded, as likewise the following Pills.

Take black Beetles gather'd in *May*, without touching 'em with one's Hand: suffocat 'em in Spirit of Wine, then dry 'em, cut 'em into pieces; and in the middle of their Body you will find a viscous Liquor, which mix with their Powder, to the consistence of a Balsam. Then take of this Balsam, a dram; distill'd Oyl of Anis and that of Cloves, of each three drops. Make Pills. Of which exhibit two Grains once or twice in Elder-flower-water, in the Morning with a fasting Stomach. They will cause a Strangury that shall last for thirty Days.

If Diuretick Medicines prove ineffectual, we ought to discontinue their use for some time, lest the Kidneys be overcharg'd with Crudities. The strongest of these Diuretics are by some call'd *Lithontriptica*, or Dissolvers of the Stone in the Body; but I doubt much if any such Medicines be yet discover'd. 'Tis certain that Spirit of Nitre will dissolve a Stone out of the Body; but the alteration it undergoes in mixing with the various Humours in the Body cramps its Virtue within us. And therefore whoever pretends to the knowledge of *Lithontriptica's* must have found out such a Medicine as is not liable to be chang'd by the Humours of the Body, and besides, that is neither an Acid nor an Alcali, but consists of both as the Stone it self, and is peculiarly calculated for its Pores, as *Aqua fortis* is for Silver. Some have exploded all *Lithontriptica's*, as being too corrosive and apt to injure the Stomach, Gums, &c. But they ought to consider, that all sharp dissolving *Menstruums* are not corrosive to the taste, as Arsenic, Quick-silver, *Mercurius Vitæ*, &c. which are altogether insipid. And besides, some Liquors are qualify'd for dissolving hard Concretes, that wo'not peck upon softer Objects; as Vinegar dissolves the shells of Eggs, while their inner Membran is left intire.

After

After the Paroxyſm is over and the Stone voided, we ought to prevent the generation of new ones by proper Preſervatives; as, 1. By keeping the firſt Paſſages clean with Laxatives, and once in three or four Months a Vomit, or a ſtronger Purge. 2. By correcting the Acid in the firſt Paſſages with abſorbent Powders, and the fix'd Salts of diuretic Plants. 3. By cleanſing the Reins and evacuating the firſt Rudiments of the Stone, with volatil Diuretics, the Spirit and volatil Salt of Tartar, the Spirit of Urine, that of *Sal-Armoniac*, the Spirit of Worms, *Elixir Proprietatis*, Turpentin, fat Broth, Whey, &c. Some commend Milk, but its Curd diſſwades us from uſing it. However we ought ſtill to remember, that the Diuretics muſt be of the meeker ſort, and exhibited only once or twice in a Fortnight or three Weeks, and that at ſome diſtance from the times of eating, but not till the firſt Paſſages are clear'd. 4. By ſtrengthening the Reins, retrieving their Ferment, and preſerving the Urine from Corruption, with balmy Medicines, ſuch as Turpentin, the Balſam of Sulphur, Juniper, St. *John*'s-wort-ſeeds, &c.

ART. III.

Of a Diabetes, *or exceſſive Flux of Urine.*

A *Diabetes* is either genuin or ſpurious. The former is a voiding of Liquors by Urine without any ſtay or alteration in the Body. The latter is a voiding of a much larger quantity of Urine than that of Liquids receiv'd into the Body. The cauſe of the former is the Laxity and Openneſs of the Paſſages which lead directly from the firſt Paſſages to the Reins. 'Tis true theſe Paſſages are not yet diſcover'd, but the quick Paſſage of ſome Liquors, and their being voided without any alteration in colour, taſte, or conſiſtence, according to the Obſervations of *Galen*, *Bartholin*, *Hildanus*, &c. do ſufficiently evince their neceſſity. The cauſe of the latter is a ſharp volatil Salt or Ferment bred in the firſt Paſſages, that diſſolves the fat Acid in the Blood, Chyle, and muſcular Fleſh, unlocking their Texture, and melting the Ferment of the Reins. Thus the balmy and nutritious Parts of the Blood being melted down, and tinctur'd with a ſharp Acrimony, they ſtimulat the Kidneys, and force their paſſage. This volatil alcali Salt is not unlike that which ſometimes cauſes melting Looſeneſſes, or that of Spaniſh Flies and Beetles, and is frequently the follower of violent Diuretics. Perhaps it alſo ſucks in the Humidity

nidity of the Air in the Body, by virtue of which it melts, and ſo increaſes the quantity of Urine, which ſometimes exceeds that of the Juices in the Body. The Symptoms of the ſpurious *Diabetes* are the crudity, thinneſs, and ſweet taſte of the Urine, with a fat Scum ſwimming upon it; a notable weakneſs, leanneſs, dryneſs of the Mouth, thirſt, a heat and pain in the Loyns, a ſlow Fever, and in ſhort, all the Symptoms of a Hectic. If it follow immoderat Labour, Venery, or Chronical Fevers, 'tis uncurable.

For Cure of a genuin *Diabetes* we exhibit Aſtringents and Aromatics, ſuch as we generally preſcribe for defending and fortifying the Stomach and Bowels in the uſe of Spaw Waters. Thus the aſtringent Crocus of Steel, the Tincture of the Sulphur of Vitriol, Bole Armenic, ſeal'd Earth, Conſerve of Roſes vitriolated, the Decoction of Orange-peel and Plantan in Chalybeat-water, are very proper. Some recommend, as an *Arcanum*, a Cocks-comb calcin'd, and exhibited with one's own Urine. As for the Cure of a ſpurious *Diabetes*; we muſt endeavour to correct the Acrimony of the volatil Alcali; to prevent the colliquation of the Juices by Narcotics, and proper Aſtringents. Firſt of all, their Diet muſt be the ſame as that of hectic Perſons. In the next place Vomiting is very proper; to which we ſubjoin the Powder of the natural Blood-ſtone, or of the artificial one, made of the Vitriol of Steel, and Sugar of Lead: The Antiphthiſical Tincture prepar'd from the ſame Ingredients. The Tincture of the Sulphur of Vitriol; the aſtringent Crocus of Steel, the Powder or Spirit of Allum; Amber, and its Troches, or thoſe of ſeal'd Earth, taken in an acid Vehicle; the Tincture of Magiſtery of Coral, prepar'd with the Juice of Citrons, or a Mixture of Coral and Vinegar.

Take of Plantan-water, three ounces; diſtill'd Vinegar, ſix drams; red Coral pulveriz'd, (not prepar'd) a dram; *Laudanum Opiatum*, two grains; Syrup of Purſlain, an ounce. Mix, and exhibit a ſpoonful frequently.

Quicklime-Water, given to four or five ounces thrice a Day, is of ſingular uſe in this Diſtemper; as alſo Milk, eſpecially chalybeat Milk, or that in which hot Iron are frequently extinguiſh'd; Aſſes or Goats Milk are the beſt, and next to them Cows Milk. The Emulſions of ſweet Almonds, and white Poppy-ſeeds are alſo very proper. Externally ſome apply to the Kidneys, the Juice of River-Crabs, or Bags of Plantan and Oak-leaves boil'd in chalybeat Milk.

ART.

ART. IV.

Of a Piſſing of Blood.

THe Urine is ſometimes tinctur'd with Blood, and that more or leſs according to its quantity. The Blood ſprings either from the Kidneys, Ureters, or Yard; or from the Contuſions of other Parts. The Cauſes are the ſame as thoſe of all Bleedings, *viz.* Either an *Anaſtomoſis* or *Diærſis*: The former is caus'd by the laxity of the Pores of the Reins, violent Motion, Jumping, Falls, exceſſive Venery, violent Diuretics, and a redundancy of Blood in the Body. The latter by ſharp corroſive Humors, as in malignant Fevers, the Small Pox, and the Scurvy; or by the application of *Cantharides*, without mixing and qualifying them with Acids; by the Stone, Ulcers, &c.

The bloody Urine is diſtinguiſh'd from that which is only tinctur'd with Salts, by its thick intranſparent Conſiſtence, and a red blackiſh Sediment, like clotted Blood, at the bottom of the Urinal. When the Blood proceeds from the Kidneys, or Bladder, a heavy or gnawing Pain beſets thoſe Parts. When the Blood is plentiful and well mix'd with the Urine, and is not curdled, but liquid when it falls to the bottom, it comes from the Kidneys. When the Blood is ſcarce, unequally mix'd, voided with Pain, and gives a clotty Sediment, it takes its riſe from the Bladder. If the Blood be voided without the Urine, or fall to the Bottom immediately upon the making Water, it proceeds only from the *Urethra*. If a ſharp Urine be voided with a ſharp gnawing biting Pain, and if a ſtrangury or difficulty of making Water went before, the flux of Blood is caus'd by the corroſion of the Veſſels. If it proceed from *Cantharides*, the Perſon is moleſted with an erection of the Yard. If it proceed from the corroſion or ulceration of the Bladder, 'tis very dangerous; but that from the corroſion or weakneſs of the Reins, is yet more ſuch.

For Cure, the Cauſes muſt be enquir'd after, and remov'd after the ſame method, as in ſpitting of Blood. A redundancy of Blood admits of bleeding. But the ſharpneſs of the Serum prohibits both that and Purgation. Rhubarb indeed may be allow'd, as being an Alterative and Fortifier of the Reins, as well as a Laxative. *Sylvius*'s Mixture of Coral, Dragons-blood, *Laudanum*, and Syrup of Myrtles with Vinegar, and

and Plantan and Cinnamon-water, is a general Prescription for all *Hæmorrhagia*'s. However, the Acrimony of the Urine ought always to be accounted for by the Juice of Plantan, or Purslain, or the Syrup of the Juice of Comfrey and that of Plantan-leaves; the Decoction of Ground-Ivy; or the following Decoction.

Take of the Herbs, Agrimony and Yarrow, the Tops of St. *John*'s-wort, and the Moss of Bullace-trees, of each a handful; Comfrey-roots, two ounces; St. *John*'s-wort-seeds, two, three, or four drams; boil 'em in chalybeat Milk, or Whey, or Black-smiths Water; sweeten the strain'd Decoction with the Syrup of Comfrey, and add to every Draught, Crabs Eyes dissolv'd in Vinegar.

The Decoction of Ground-Ivy, or Ground-Pine; Sheeps-Milk exhibited to four ounces, with a dram of Bole-Armenic; Amber, and especially its Troches given to a dram, with half a dram of Bole-Armenic and a little Vinegar in Plantan-water, or with Crabs Eyes and Sugar of Lead; the Tincture of the Sulphur of Vitriol, the Antiphthisical Tincture; prepar'd Blood-stone exhibited with Milk, (especially when the Disease is caus'd by *Cantharides*) and the Emulsions of milky Seeds: These, I say, are all very proper, and ought to be frequently interlac'd with *Laudanum Opiatum*. To these we add vulnerary Ingredients, especially the Juice or Powder of River-Crabs, and Turpentin, either given in Pills with Rhubarb, or dissolv'd with the Yelk of an Egg, in some convenient Vehicle. The Spirit and Oyl of Turpentin are too sharp. If the Bladder be ulcerated, we may inject the Troches of Amber mix'd with Plantan-water, or the Juice of Plantan with the Powder of Blood-stone. When the pissing of Blood is over, we ought to dissolve the clotted Blood that may remain in the Bladder, with Amber and its Productions.

CHAP.

CHAP. II.

Of Diſeaſes relating to the Expulſion of Urine from the Bladder.

ART. I.

Of a total Suppreſſion of Urine, ariſing from its ſtay in the Bladder.

THe Urine being ſeparated in the Kidneys, is convey'd thro' the Ureters to the Bladder; and when its diſtending quantity, or its ſharpneſs provokes the Bladder to Contractions, is voided thro' the *Urethra*.

This natural Evacuation is ſuppreſs'd either thro' the default of the Bladder, or of its *Sphincter*, or of the *Urethra*. The Bladder is faulty when its Fibres are heedleſs and ſtupid, as in malignant Fevers; or relaxated, and unable to contract it. This may be occaſion'd by ſtaying long in cold Water, by Wounds, Blows, Bruiſes in the lower part of the Back, or any Injury done to the Nerves of the Part; by an exceſſive quantity of Urine forcibly retain'd in the Bladder; by Worms, Ulcers, Inflammations, Tumors, &c. in the Bladder and adjacent Parts; and by the remiſſneſs of the Muſcles of the *Abdomen*, which ought naturally to preſs its Fibres. The *Sphincter* is faulty when it ſhuts the Orifice, by virtue of its conſtant Contraction. 'Tis provok'd to ſuch Contractions by Cholic and Nephritic Pains, Scorbutical Pains in the *Abdomen*, and the Application of Spaniſh Flies. The *Urethra* or Paſſage which leads from the Bladder is faulty, when Inflammations, Tumors, or Venereal Excreſcences beſet the Neck of the Bladder, *Proſtratæ* or *Perinæum*; or when 'tis block'd up by a Stone, clotty Blood, or viſcous glutinous Humours occaſion'd by uſing Diuretics immediately after eating before the Chyle be transform'd, or by giving bad Milk to new-born Children, who are naturally liable to that Symptom.

The Symptoms of this Diſtemper are theſe: When the Bladder is over-diſtended by a large quantity of Urine, the Perſon is moleſted with a grievous Pain, and vain deſire of making Water, and the ſuppreſſion is difficult to cure; when the Bladder is paralytic, 'tis inſenſible of Pain, or of any Provocation to evacuat; when the urinary Paſſage is ob-

obstructed, a painful Tumor appears in the Pubes, and is exasperated by touching. If clotted Blood cause the Obstruction, 'tis discover'd by preceding Falls, Bruises, pissing of Blood, &c. If glutinous Humors block up the Way, antecedent Causes, and Slime voided with the Urine, will give us to know it. If a suppression of Urine in the Bladder be free of all Pain, and attended by a *Tenesmus*, and Hiccough, it prognosticates Death. That from a Schirrus in the Neck of the Bladder, or adjacent Parts, is not easily cur'd.

The Cure is vary'd according to the Causes. If the Bladder be paralytic, and insensible, we give inwardly cephalic Medicines, especially the Elixir and distill'd Oyls of Juniper; the distill'd Oyl of Amber, or that of Turpentin, the Brains of Magpies, &c. and inject Clysters, first of emollient Ingredients, and afterwards of Centory, Coloquintida, &c. Or we administer gentle Purgatives, and order the Person to keep in his Breath, and squeeze the *Abdomen*. If these Methods be ineffectual, we open the Passage with a Catheter, or rather a Wax-Candle, anointed with Hony and Oyl of sweet Almonds. When the Bladder is empty'd, we inject the Decoction of Sage, Penny-royal, wild Marjoram, Calamint, Rue, Castor, &c. in Wine; and foment the external Parts with a Spunge, or apply Cataplasms of Pellitory, and Oyl of Scorpions; or anoint the *Pubes* and *Perinæum* with a Liniment of the Oyntment of Marshmallows, Oyl of Scorpions, and distill'd Oyl of Juniper, applying afterwards to the *Os sacrum* and *Pubes* the Plaister call'd *Nervinum*, soften'd with the Oyl of Amber. If the suppression be very obstinate, we order bathing in the Decoctions of emollient and nervous Plants, exhibiting at the same time some gentle Diuretic. In malignant Fevers, we apply the same Ointments and Decoctions, and order the Patient to walk up and down the Room. When the Bladder is distended, we use the same Method. When the *Sphincter* is contracted, we exhibit inwardly the Specifics for Convulsions, mix'd with Opiats; and anoint with a Liniment of the Ointment of Marsh-mallows, mix'd with the Oyls of Poppies, Castor, and Amber.

If the Passage be stopp'd by clotted Blood, we exhibit Crabs Eyes with Vinegar, the Decoctions of Chervil, *Sperma ceti*, &c. and foment or bathe with the Decoctions of Antipleuritical Ingredients; applying likewise Cataplasms of fresh Cows Dung. If viscid Humors block up the Passage, we

we give firſt a gentle Purge; then the Juice of Limons with Spirit of Turpentin, or Spirit of Salt; the Juice of Radiſhes, and Decoctions of aperient and diuretic Ingredients, to which black Garden-Currans are added. If the *Proſtata* be ſwoll'n, we apply Cataplaſms of Brook-lime, and Chamomil-flowers. If purulent Matter ſtick in the way, we exhibit the Oyl of Amber, and that of Juniper, and clear the Paſſage with a Cacheter, provided the Bladder be not inflam'd. If Excreſcences beſet the *Urethra*, we eat 'em away with Corroſives, applied with a Candle of Wax and Turpentin, and then conſolidate the Ulcer with *Unguentum Album Camphoratum.*

For all Suppreſſions of Urine in general, we foment the Parts with the Decoction of Pellitory, Anis and Parſley-ſeeds, Zedoary and Bay-berries, in Wine; and apply Cataplaſms of Pellitory (growing upon the Rubbiſh of old Walls) with roaſted Onions, Garlick, Oyl of Scorpions, and Oyl of Juniper; or anoint with the ſame Oyls mix'd with Rock-Oyl.

ART. II.

Of the Stone in the Bladder.

THe Stone of the Bladder is, for the moſt part, firſt bred in the Reins, and introduc'd by Nephritic Pains; and, when it deſcends through the *Ureters* into the Bladder, receives a conſiderable increaſe from the Mucilage, or deprav'd nutritious Juice, that ſticks to it, and becomes hard as it ſelf. Thus we find that Stones in the Bladder are cover'd like an *Onyon* with ſeveral diſtinct Coats, and have a Kernel in the middle, which repreſents the Stone as it came from the Kidney. The Symptoms are; a ſudden ſtopping of Urine in the very time of making it, follow'd by a violent and vain Deſire of finiſhing that Evacuation, and of going to ſtool; a dull ſenſe of weight about the *Perinæum* and *Pubes*; a pain, and itching in the Nut of the Yard, and its perpetual Erection, occaſion'd by the irritation of the innner Membrane: When the Perſon ſtoops to pull up any thing from the Ground, he feels a pricking pain about the *Pubes*; when he jumps, he feels it move, unleſs it be grown to the Membrane, as when the Bladder is tore; in which caſe it muſt be ſearch'd with a Cacheter. When the *Evil* is inveterat, the nutritious Juice of the injur'd Parts is deprav'd,

prav'd, and voided in the form of a Mucilage like white Clay, which some are apt to take for the Matter of which the Stone is bred, whereas 'tis properly its effect. The Stone in Women is more easily cur'd than in Men, whose Bladder is more inaccessible. If it be inclos'd in a peculiar Membrane, 'tis scarce curable.

The internal Cure is the same as that of a Stone in the Kidneys, to which we refer the Reader. The Blood and Urine of a Goat, and the Juice of Wood-lice bruis'd with the Spirit of Juniper-berries, or Tincture of Tartar, are particularly recommended; as also Pills of the Salts of Ivy-berries and Water-Cresses mix'd with the Crystals of Nitre and Tartar, and with Turpentin. If the Stone be in motion, and be not very large, we may give a Vomit to drive it out. Externally we inject proper Liquors for dissolving the Stone; for which purpose some commend the warm Blood of a Goat or Fox; or the Solution of calcin'd Pigeons-dung in Pellitory-water. We likewise order Fomentations and Bathing in proper Decoctions; and anoint the *Pubes* and *Perinæum*, with a Liniment of Rock-oyl, and the express'd Oyls of Poppies and Henbane; or apply a Cataplasm of white Onions boil'd in Wine, and mix'd with the Oyl of Scorpions. As for Clysters, their Virtue is sufficiently known. When all proves ineffectual, the Stone must be cut; and if the Inflammation and Gangrene of the Bladder can be prevented, there's no great danger in the Operation.

ART. III.

Of the Incontinence of Urine.

AN Involuntary Efflux of Urine is caus'd by the imperfect Constriction of the *Sphincter*. The remote Causes are,

1. The Palsey and Stupidity of the *Sphincter*, occasion'd by the Weakness and Deficiency of the Animal Spirits, as in Fevers and Apoplexies; or by the Obstructions of the Nerves, from internal or external Causes.

2. The Relaxation of the Fibres of the *Sphincter*, occasion'd by a preternatural distention of the *Vagina* and Neck of the Bladder in Child-birth, or the down-falling of the Womb.

3. The cutting or tearing its Fibres, especially in cutting the Stone, or in time of Delivery, when the Midwives scratch the *Caruncula Myrtiformis* with their Nails.

Sometimes the Efflux of Urine cannot be properly called involuntary; but 'tis ſuch, that the Perſon is frequently oblig'd to make Water, and cannot retain the Urine ſo long as naturally one may. The immediat Cauſe is the perpetual Irritation of the Bladder, occaſion'd by rough Stones, or ſharp Humours; or the Compreſſion of the Bladder, caus'd by the diſtended Womb in Women with Child, or by exceſſive Laughing and Coughing, eſpecially in fat Perſons; or by Inflammations of the Muſcles of the *Abdomen* and adjacent Parts. Some Perſons are liable to an involuntary voiding of Urine when they're aſleep, eſpecially Children and old Perſons, whoſe Spirits are lazy and inactive.

An Incontinence of Urine, proceeding from a Palſey, or from the default of the Brain, or Spinal Marrow, is very difficult to cure. In old Perſons, or when it follows Childbirth, 'tis ſeldom cur'd. In Fevers, 'tis a fatal Sign. In Children 'tis overcome by Nature before the twenty fifth Year of Age; or elſe accompanies 'em to the Grave.

The Cure in general is perform'd by Aſtringents, eſpecially the Decoction of Calamint, Agrimony, and Mint in Wine; the Powders of Galangal, Aloes-wood, Acorus, Caſtor, Myrrh, Frankincenſe, Gum Arabic, and Maſtich. The moſt noted Specifics are the Throat of a Cock roaſted, pounded, and given to a dram in Wine; the Powder of a burnt or calcin'd Hedge-hog; the Powder call'd *Medulla Saxorum*; The inner Tuncicle of a Hen's Ventricle, which, when dry'd, becomes hard like Horn; the Fiſh found in the Belly of a Pike; the Powder of a Sow's Womb, or for Men, of a Boar's *Pudendum*; the Powder of Hog's Hoofs; the Powder of dry'd Mice; and the Dung of a She-Goat. Externally we order Fomentations, and Baths, of the Decoctions of aſtringent nervous Plants, ſuch as Mint, Wormwood, Pomegranat-flowers, Tormentil-roots, and eſpecially Comfrey-roots, in Blackſmiths-water. For old Perſons, there's nothing ſo proper as the natural hot Baths. After Fomentation or Bathing, 'tis convenient to anoint the Loins and Pubes with the Oils of Mint, Amber, Wormwood, Maſtich, Balſam of *Peru*, diſtill'd Oil of Juniper, Turpentin; and to apply the Plaiſter *Oxycroceum* ſoften'd with Oil of Amber. After hard Labour in Child-birth, ſome recommend an Ointment of Calaminar-ſtone, waſh'd in Vinegar and Roſe-water, and pulveriz'd with Litharge of Silver, Ceruſs, Oil of Roſes, Oil of Chamomil, and Goat's Fat. In fine, the Powder of a Toad, taken alive and burnt in a new Pot, being hung in a Bag about

about the Neck, is universally approv'd of for curing any Incontinency of Urine.

ART. IV.

Of a Strangury.

A Strangury is a making of Water by drops, with an unsufferable Pain in the Neck of the Bladder, and *Urethra*, and a violent Itch for pissing and going to stool. The Cause is the Acidity and Sharpness of the Urine, which provokes the Bladder to contraction, and when the *Sphincter* opens to give it vent, provokes it likewise to shut the Passage. Thus, the reciprocal Contractions of the Bladder and *Sphincter*, occasion the voiding of Urine by drops; and the sharpness of the Humour causes the excessive Pain, which is more violent in the *Urethra* than the Bladder, by reason that the one is defended by a slimy Matter, and the other is not. The remote Cause of the Acidity of the Humors, is an imperfect Digestion in the Passages, and the Inactivity of the Bile. Thus new Wine or Ale will cause a Strangury, by turning acid in the Stomach. The Strangury which attends the Venereal Disease, proceeds from a sharp corrosive Lymph, voided by the *Prostatæ*. If a Strangury continue long, 'tis apt to create Ulcers of the Bladder; nay, sometimes it may proceed from Excoriations or Ulcers of the Bladder. In old Persons, whose digesting Faculty is weak, 'tis almost incurable.

The Cure consists in tempering the sharpness of the Humors, and rectifying the state of the Bladder. The latter Indication is taken care of above. The first is answer'd by Vomits, which are wonderfully useful in all Diseases relating to the Urine. Purges of Rhubarb, or Jalap and Turpentin, are also very proper. When the first Passages are clear'd, the Essence or rather the distill'd Oil of Orange-Peel, is of admirable efficacy for destroying the Acid, and whetting the Bile. In general we recommend for a Strangury, the Decoction of Black Currans and Carrot-seed in red Wine; the Decoction of Winter-Cherries, with Raisins; the Decoction of Rapes; the Emulsions of Hemp-seed and the four cold Seeds; the Oil of sweets Almonds mix'd with the Syrup of Marsh-mallows and Crabs-Eyes; the Juice of River-Crabs; the Infusion of Onions in some proper Vehicle; the dulcify'd Spirit of Nitre; the carminative Spirit *de tribus*; the Spirit of

Tartar; the Spirit of Wine taken every Night going to Bed; the Balſam of Sulphur; Oil of Amber; Troches of Amber; and, above all, the Balſam *Capaivi* given in Parſley-water, and Borace given to a ſcruple. A Strangury caus'd by new Ale, is cur'd by the Powder of Nutmegs. If theſe Medicines prove ineffectual, we muſt have recourſe to Aromatic Ingredients, ſuch as Galangal, Zedoary, Orange-Peel, Elixir of Juniper-Berries, and eſpecially Wine in which burning Flint-ſtones are extinguiſh'd.

Externally, anoint the Navel (which communicats with the Bladder by the Urachus) with a mixture of Goats-Tallow, and the diſtill'd Oils of Wax and Orange-Peel; or fumigat the Parts with the Decoction of Radiſhes in Wine. Inject chalybeat Milk, or Oil of ſweet Almonds, into the Bladder; and in time of piſſing let the Yard be put into warm Milk. Anodyn emollient Clyſters are alſo proper; as likewiſe emollient Fomentations and Baths. For old Perſons there's nothing ſo ſerviceable as the natural hot Baths.

ART. V.

Of a Dyſuria, *or Heat of Urine.*

A *Dyſuria* is a voiding of Urine with a great deal of Pain and Heat. It differs from a Strangury in this, that the Urine is not voided by Drops, but in a due quantity; that the Pain vaniſhes after making Water; that it cauſes no vain deſire of Piſſing, or going to Stool, and that its Pain is accompany'd with a burning Heat. The Cauſe for the moſt part is the Inflammation, Corroſion, or Ulceration of the Neck of the Bladder, Urethra or adjacents Parts. Thus the Stone ſometimes galls the Parts as it paſſes, and cauſes a Heat of Urine. The Inflammation of the *Proſtatæ*, or the ſharp corroſive Humor voided by 'em; the Inflammation of the Womb, *Inteſtinum Rectum*, or the Emrods, will produce the ſame effect. Sometimes, but very rarely, it proceeds from the ſharpneſs of Urine, as being laden with ſcorbutical Salts, or mix'd with ſome purulent Matter, or impregnated with Cantharides, or corroſive Preparations of Mercury. When the Bladder and adjacent Parts are thus diſorder'd, their nutritive Juice is deprav'd, and voided with the Urine, in the form of a thick milky Mucilage; in which caſe the Diſeaſe is dangerous. If this Diſtemper continue long, it degenerats into an Ulcer of the Bladder, or Incontinence of Urine.

The

The Cure consists in tempering the sharpness of Urine, and rectifying the state of the Bladder and adjacent Parts. For which Purposes the same Medicines as were recommended for a Stangury are proper; to which we may add the Conserve of Mallows-flowers, the Decoction of Sebesten with House-leek-water; Whey, or Milk in which Blew-bottle or Larks-heel-flowers are boil'd (especially when the Disease is occasion'd by Cantharides;) Turpentin mix'd with Amber, Frankincense, Myrrh, and the Juice of Liquorice; the Bladder of a Goat in Powder, with the distill'd Oil of Caraways; the Powder of Dates with Sugar, and *Laudanum Opiatum*. Note, the Spirit and Oil of Turpentin are too sharp.

Take of the Conserve of Violets, an ounce and a half; Rob of Juniper, six drams; Powder of the Seeds of St. *John*'s-wort, three drams; prepar'd Crabs Eyes, a dram; prepar'd Pearch-stones, half a scruple; *Laudanum Opiatum*, a grain and a half. With the Syrup of Scabious make an Electuary.

Externally we apply Cataplasms of Rue, Pellitory and Chervil, boil'd in Milk, and mix'd with the Oil of Scorpions; or anoint the *Pubes* with the Ointments *Martiatum* and *Agrippæ*, mix'd with the Oil of Bays. The Injection of Milk and living Lice; the use of Baths, and Clysters, are also very proper. If the Bladder be ulcerated, we inject, first, cleansing, and then consolidating Decoctions. Of which more elsewhere.

SECT. XX.

Of Diseases relating to the Separation of Lymph in the Glandules, and its regular Motion.

THE *Lymph* is a Liquor separated by Glandules; some of which are gather'd into a round uniform Globe, and are call'd *Conglobatæ*; some into a Cluster, call'd *Conglomeratæ*. The former convey their Juice thro' lymphatic Vessels into the left axillary Vein, where it dilutes, and prepares the Chyle for an easie union with the Blood; and likewise promotes the fermentation of the Blood in the Heart and Lungs, as being of a volatil spirituous Nature. The latter throw

their Juice into ſome noted Cavity, as the Spittle in the Mouth, the Juice of the Swear-bread into the Guts, &c. Theſe Juices, when ſeparated or ſuck'd from the Blood, partake of acidity, which is qualify'd by the animal Spirits repairing to the Glandules, they being condenſated and incorporated with the Liquor. The Separation of this Liquor is frequently diſturb'd by the Obſtruction of the Glandules, of which elſewhere.

ART. I.

Of Catarrhs.

A Catarrh is a preternatural Defluxion of Lymph from the conglomerated Glandules, into ſome noted Cavity of the Body, particularly the Throat, Breaſt, and Head, where theſe Glandules are very plentiful, and their Lymph is moſt liable to alterations from the Air. A Catarrh therefore proceeds from the Conſtriction of the Fibres of the Glandules, occaſion'd by ſome provoking Cauſes. Theſe Cauſes are either External or Internal. The former are the malignity of the Air (in Epidemical Catarrhs) ſharp Steams, and external Cold contracting the Fibres, hindring a free Tranſpiration, and ſo occaſioning the redundancy, ſtagnation, and provoking ſharpneſs of the Lymph. The internal Cauſes are the ſharpneſs or acrimony of the Blood, and conſequently the Lymph, occaſion'd by an imperfect Digeſtion in the Stomach, ſcorbutical Salts, &c. Or the occaſional Corruption of the peculiar nutritious Juice of the Glandules, which being deprav'd, ſticks to their ſides, and provokes 'em to Contractions. This degeneracy of their Juice ariſes from external Injuries; or whatever internal Cauſe is apt to weaken or exhauſt their innate Spirit.

When the Fibres or innate Spirits of the Part are weaken'd, the Catarrh is *Habitual* and apt to relapſe; in other Caſes 'tis only *Accidental*, and generally takes its riſe from external Occaſions. When a Catarrh begins, 'tis *Thin* and *Sharp*, as being the pure Lymph without mixture; but afterwards by its continued Flux it depraves the nutritive Juice of the Glandules, which mixes with it and renders it *Thick* and *Temperate*. When the Lymph is very Corroſive and Sharp, 'tis uſually call'd a *Hot* Rheum; when 'tis Thick and Slimy, 'tis entitled *Cold*.

There

There is yet a Spurious sort of Catarrh, near ally'd to this above-mention'd, *viz.* The Stagnation of the serous part of the Blood in any parts, either before or after its conversion into Lymph, as when nocturnal Cold, or the diminution of the ordinary Transpiration, causes Pain in the Limbs. This is not properly a *Catarrh*, but a Stagnation of Serum or Lymph, caus'd by the Constriction of the Fibres of the Part in which 'tis lodg'd. Thus the Tooth-ach, scorbutic Pains in the Limbs, bastard Pleurisies, *&c.* are of the same kind. The Causes from which they take their rise are much the same as those of the genuin Catarrh. Sometimes the true Catarrh causes Fevers, which are particularly accounted for in the Section of Fevers.

An imminent Catarrh is usher'd in by a wearines of the Joynts, heavines of the Head, dullnes of the Senses, and Froth making a Circle in the Urine. If the Lymph be thin and sharp, 'tis mostly voided in the Night-time, and a slow Fever increasing towards the Evening accompanies it; if it be thick and slimy 'tis equally troublesome at all times, but the Symptoms are more remiss. If a Catarrh recur frequently in the same part, or if the part be influenc'd by the Alterations of the Weather, 'tis a sign that the nutritive Juice of the Glandule is deprav'd, and its innate Spirit weaken'd. If it be caus'd by the Crudities, or imperfect Digestion of the Stomach, it distinguishes it self by frequent Relapses either in the same or different Parts; by the Person's propensity to Spit and Sweat much; and the thinnes and paleness of the Urine. Catarrhs in the Breast or Wind-pipe are apt to cause a Cough or Phthisic. In old Persons they're scarce curable, by reason of the weakness of their digestive Faculty, the natural laxity of their Glandules, flatness of their Spirits, and acrimony of the Serum. A Catarrh in the Glandules of the Brain is apt to cause Palsies, Lethargies, and such like Disorders of the Spirits. That from the Nose and Mouth is least dangerous, especially if the Matter come quickly to concoction.

As for the Cure, let the following Cautions be minded.

1. The best evacuating Medicines are Diuretics and volatil Sudorifics. When the Stomach is faulty, Vomits and Purges are proper, but not in other Cases.

2. Chronical or Habitual Catarrhs, proceeding from the acrimony of the Serum, as in old and scorbutical Persons, are influenc'd by the Moon, and therefore Preservatives ought always to be exhibited before the new-Moon.

3. Opiats are of excellent uſe, eſpecially in the beginning of a Catarrh ariſing from external Cauſes. They ought always to be mix'd with volatil Salts, and proper Specifics. Towards the height of the Diſeaſe, or in epidemical and critical Catarrhs, they muſt be cautiouſly us'd.

4. Iſſues and blittering Plaiſters, are of uſe for draining the Lymph, or relieving a particular Part; but they cannot remove its Cauſe. Therefore in ſcorbutical Caſes, or when the Evil is inveterat, and ſcarce curable *à Priori*, we muſt inſiſt on ſuch a palliative Cure, being directed thereto by Nature, which frequently throws out the Lymph by Ulcers in the Legs.

5. Bleeding is not proper. But in ſome particular Caſes, as when the Body is very plethoric, or Blood ſuppreſs'd in the Body, or when the Catarrh falls upon a noble Part, 'tis allowable.

Theſe Cautions being premis'd, let's now conſider the Indications: *Viz.*

1. The Activity of the Cauſe, and Senſe of the Part ought to be impair'd by Opiats.

2. The Quantity of the Lymph muſt be leſſen'd, its vicious Quality corrected, and the ſolid Part cleans'd by volatil Sudorifics.

3. The Stomach muſt be ſtrengthen'd, its due Digeſtion retriev'd, and the ſolid Part fortify'd by balmy Aromatics.

The Specifics proper for theſe purpoſes are Mother of Thyme, Roſemary, Avens-roots, Juniper-berries, and all Aromatics; Saſſafras, eſpecially its Tincture, prepar'd with the Spirit of wild Thyme; Amber and all its Productions, eſpecially the ſuccinated Spirit of Harts-horn; Myrrh, Sulphur or its Flowers, Maſtic-wood, and *Sperma Ceti*. From ſuch Ingredients we make ſeveral Preſcriptions, ſuch as the Decoctions of Woods; the Infuſion of Aromatic and Stomachical Herbs in Wine, an Electuary of the Rob of Juniper-berries mix'd with Spices, *&c.* The Cure of ſharp and thick Humors varies, as that of dry and wet Coughs. In ſcorburical Caſes we always add ſome Preparation from the Pine-tree. When we exhibit Purgatives we mix 'em with the Specifics, as in *Crato*'s Pills of Amber. Jalap, ſweet Mercury, and, in inveterat Caſes, Hellebor, are recommended. If the Humor be thick, *Coloquintida* corrected with Salt of Tartar, or *Ferra foliata Tartari*, will be very proper. Externally in Catarrhs of the Head, we apply to the Crown of the Head and Temples, the Oil of Amber, diſtill'd Oil

of

of Mace; or of Harts-horn, if the Person be not offended by the smell; and the Plaister of Betony mix'd with Tacamahac, and soften'd with the Oil of Amber. In Catarrhs of the Breast, we fumigat the Mouth and Face with Amber, Mastic, Benzoin, &c. But above all, the Smoak of Tobacco is of admirable use, if it be mix'd with the Powder of Amber, Anis, or Coriander-seeds, &c. The spurious Catarrhs above-mention'd are cur'd internally with Sudorifics and urinous Spirits; and externally by applying the Gum Tacamahac and Caran, or, if the Skin cannot bear Gums, the rectified Spirit of Wine impregnated with Aromatic Plants and Seeds. However all oily Things ought to be carefully avoided.

ART. II.

Of a Coryza.

THe most common Instance of Catarrhs is that call'd *Coryza*, or a Defluxion of Matter from the Nose, which at first is thin and sharp; but in process of time the nutritious Juice of the Nostrils being deprav'd, renders it thick. The Membran in the Head of the Nostrils is frequently provok'd to sneezing, and the nervous *Tubuli* being likewise assaulted communicate their convulsive Disorders to the *Membrana dura* of the Brain; whence insues a heavy Pain, and a sense of Squeezing as it were in the Head. Sometimes the sense of Smelling is quite lost, and the Nostrils are gall'd and ulcerated. The Cure is the same as that of Catarrhs in general. While the Humor is thin, we ought to remove the Irritation by exhibiting inwardly volatil Salts; and applying outwardly the distill'd Oil of Anis, or rather that of Amber, mix'd with a few Drops of the Oil of Cloves, with Cotton. The Smell of the Shavings of Horn, the Steams of burnt Amber, Mastic, Benzoin, Gum *Animæ*, &c. And the Smoak of Tobacco impregnated with a few Drops of the distill'd Oil of Anis; are likewise very serviceable. When the Humor is thick, and the Nostrils stopp'd, we must endeavor to attenuat and evacuat it, by fumigating with Vinegar upon hot Iron, or applying the Spirit of *Sal-Armoniac*, or the Oil of Almonds with Camphyr dissolv'd in it, both to the extremity, and internal Membran. Sneezing Powders are also very useful, such as the Powder of Florentin-Orris with *Euphorbium*; the Powder of black Hellebor

lebor with Sugar; Tobacco-leaves ſprinkl'd with a few drops of the Oil of Marjoram, and dry'd; or mix'd with the Powders of Marjoram, Flowers of the Lilley of the Valley, diſtill'd Oil of Anis, Amber, and Moſch. The Solution of white Vitriol in the Decoction of Tobacco, Marjoram, and Flowers of the Lilly Convally, is alſo very proper. If the Head be diſturb'd or clouded, we anoint the Crown of the Head with Balſam of *Peru*, or Oil of Amber. If the Mouth be much moleſted, we order Troches of Mithridat, Maſtic, and Olibanum, to be roll'd in the Mouth.

As for the Cough, Hoarſeneſs, Bleareдneſs of the Eyes, and all the other ſubdiviſions of Catarrhs, they are treated of in their proper places.

Thus we've diſpatch'd the Diſeaſes relating to the Diſtribution of the Lymph. As touching thoſe proceeding from its Stagnation, *viz.* Hydropical Tumors in the Abdomen, Head, Breaſt, Womb, Teſticles, *&c.* Their Cure is the ſame with that of an univerſal Dropſie. Beſides, they are in a great meaſure diſcuſs'd in the particular Chapters allotted to the Diſorders of thoſe Parts.

AN

AN ABRIDGMENT OF ETMULLERUS HIS *Practice of* PHYSIC, *&c.*

BOOK II.

SECT. I.

Of the Diſeaſes which diſturb the Generation and Diſtribution of the animal Spirits, and conſequently the due Performance of Senſe and Motion.

THE Diſeaſes of the lower Region of the Body were our laſt Subject. It remains now to move upwards, and conſider the Diſorders of the Head; Where the Spirits are ſeparated and ſtrain'd from the Blood by the *Glandules* of the *Cortical* Part of the Brain; and from thence convey'd to the Body. Without the Influence of theſe Spirits all Motion and Senſe ceaſes, as is evident by the Diſſection of a Nerve.

They require no Fermentation to fit 'em for their Office, being ſufficiently prepar'd by a bare Separation from the Blood; and are equally capable to ſerve any Senſe. The ſame Spirit that aſſiſted in moving the Muſcles of the Leg, would

would have ſerv'd the Eye in the ſenſe of Seeing. 'Tis true, the Spirits of one Man differ very much from thoſe of another. The different Condition of the Maſs of Blood, and Diſformity of the Brain, occaſions a remarkable difference of Spirits, which is viſible in the variety of animal Operations, Thought and Genius, among Men. Nay, in one and the ſame Man, any alteration of the Humors of the Body and Maſs of Blood, produces the like change in the Spirits. When the Blood obſerves its regular Courſe, the Spirits are likewiſe orderly; and when 'tis inflam'd or boils too high, they become enormous, and cauſe a Perturbation in the Mind; which depends upon them, and can never pretend to Clearneſs and Juſtneſs of Thought, without the ſteady and equal Influence of the Spirits. When their Motions are clever and ſwift, they cauſe a nimble and ready Wit; when they are lazy, and move heavily, they make a dull inactive Soul; and when their Motion becomes more languid, Sleep takes place; which is always introduc'd either by exhauſting the Spirits, by thickning and fixing them with ſleeping Medicines, by rendring them flaggy and dull, or by clogging them with nutritious Juice or ſome ſerous Humor, that diſtils upon the Brain in time of Watching.

To return to the Generation of the Spirits. It may be diſturb'd, 1. When the Spirits are deficient, for want of a due Exaltation of the Blood, or by reaſon of ſome Fault in the Texture of the Brain, or an immoderat Conſumption by Exerciſe. This Symptom is cur'd by exhibiting generous and ſpirituous Medicines, as Spirit of Amber, Spirit of the Lilly of the Vally, with volatil Salt of Hartſhorn, and all the oily volatil Salts. 2. When the Spirits are numerous and crouded, which generally yields to Faſting, Sleeping, or Exerciſe. 3. When the Spirits are corrupted, they reſemble rectify'd Spirit of Wine, and may ſuffer Depravation by mixing with foreign Spirits, or becoming phlegmatic, and degenerating from their volatil Subtilty, or by engaging in irregular Motions.

Before I deſcend to Particulars, it will not be improper to premiſe three or four Poſitions that ought to be heedfully obſerv'd.

1. That the Brain, Nerves, Membranes and Ligaments are all compos'd of little ſmall Fibres, which are ſtronger in the Nerves and extreme Parts of the Body, than in the Brain and *Medulla Spinalis*. Theſe Fibres are naturally bent and endow'd with a rebounding Virtue upon the approach of an

exter-

external Objects, or the impulse of the Spirits from within. Their Texture is variable according to the Constitution of every Individual, and the different Motions of several sorts of Spirits. From whence ensues the variety of the animal or sensitive *Phænomena's*.

2. That the Brain and Spirits have a peculiar dependance upon the Moon; and upon that account the Diseases of the Head encrease or diminish in proportion to its Age. The Spirits when disorder'd are more sensible of this Influence than in their natural State. 'Tis true, the Sun has some ascendent over our Bodies; but that properly relates to the vegetable and vital Functions; the *Animal* Province being more peculiarly allotted to the Moon.

3. That there is an admirable Sympathy betwixt the Brain and the Bowels, especially the Stomac. An ungrateful Imagination disturbs the Stomac, and Vomiting and Giddiness do equally give rise to one another. The Disorders of the Stomac and lower Belly have a visible Influence upon the Fancy, as in the case of Hysteric or Hypocondriac Fits, and the ridiculous Appetites of Women. *Helmont* was very happy in this Observation, and the practical Inferences he deduc'd from it; but his Theoretic Conjectures are frivolous. The reason why the Spirits and the Stomac do so sensibly affect one another, seems to be this: That the Mouth of the Stomac is the first part of all the Body that receives any sensible Impression in the Womb; for so much as all Alterations in the *Embryo* must be produc'd by the Nourishment convey'd to the Stomac. This establishes an early Correspondence betwixt it and the Spirits, and lays the lasting Foundation of their future Intimacy.

4. That the Spirits are liable to the same material Alterations with the Blood.

CHAP. I.

Of immoderate Watchings.

WE are said to wake when the Spirits are distributed thro' the Organs of Sense, and extend their Fibres: On the contrary, Sleep unbends the Fibres, and imprisons the Spirits. The Privation of which causes Disorders in the Body.

The immediate Cause of Watchfulness is a continued or violent Incursion of Spirits into the Organs of Sense. The remote

remote Cauſe, barring ſome exernal Object, muſt either be the Diſorder of the animal Spirits, or ſome defect in the Brain. The Spirits are often-times too nimble and moveable, as in young People and ſuch as feed high, and drink generous Liquors. The Heat of Summer, or travelling in a hot Climat, eating of Veniſon, immoderat Care, Study, and the Paſſions of the Mind, the acceſſion of foreign heterogeneous Particles from malignant Diſtempers, or drinking Tea and Coffee, are the natural Cauſes of the Mobility and Diſorder of the Spirits, and conſequently of Watchfulneſs. As for the Brain, Watchings will inſue upon the Openneſs of its Pores, occaſion'd by a Dryneſs, or want of Moiſture to fill up the Intervals. This may happen thro' Faſting, or eating of ſharp volatil Meats, immoderat Venery, Sweating, ſmoaking Tobacco, (which, tho' it be an Opiat, exhauſts the Moiſture of the Brain) an unſeaſonable Uſe of purging Medicines, or a Deficiency in the firſt Digeſtion, which not only affects the Spirits by conſent, but robs the Brain of its wonted Recruits, in neglecting the regular diſtribution of the Chyle.

This Diſeaſe is manifeſt of it ſelf. As for Prognoſtics; It infers a Weakneſs and Feebleneſs. 'Tis more ſufferable in Youth than in a State of Manhood; and among Men than among the Female Sex. It portends ill in acute Diſtempers: But in chronical Diſeaſes may be longer endur'd, tho' 'tis often-times follow'd by Phrenſies, Folly, or Stupidity.

The Cure is perform'd by taking off the remote Cauſes. If it be caus'd by the Inflammation and Impetuoſity of the Blood, a Vein muſt be open'd. If the Blood be ſharp and oppreſs'd with heterogeneous Particles, Purgation and Sweating take place. If it ſprung from the Diſorder of the animal Spirits, they muſt be reduc'd to Order by the uſe of pacific Medicines, ſuch as *Opium* or *Laudanum opiatum*, or their Compounds. *Bartholinus* commends the Eſſence of *Opium* prepar'd with Spirit of Vitriol or Spirit of Cockle; *Ens Veneris*, which conſiſts of Vitriol and Sal Armoniac, and likewiſe the Anodyn Sulphur of Vitriol, are proper in this caſe. But in uſing Opium, we ought to obſerve theſe Cautions: Not to exhibit it when the Watchings are owing to the Efforts of Nature, endeavouring a Solution of a Diſeaſe; or when they are attended with a ſtraitneſs in the Breaſt, or difficulty of Breathing; or when they proceed from the deficiency and want of Spirits, as in old Men, *&c.* In general, the mildeſt Opiats are the ſafeſt. Let them be given in ſmall Quantities, and repeated often. As,

Take

Take of the Conserve of wild Poppy-flowers one dram, Venice-treacle or Diascordium half a dram, *Laudanum Opiatum* one grain. Make a Bolus. Or,

Take of native Cinnabar fifteen grains, *Saccharum Saturni* eight grains, *Laudanum Opiatum* one or two grains; with the Extract of Saffron make Pills to be taken in the Evening, about an Hour before Supper.

As for the Watchings which arise from the Dryness and Openness of the Brain, moist and cooling Medicines are most proper: such as Emulsions, and other oily temperat Compositions.

Take of the four greater cold Seeds, of each half an ounce, Garden Poppy-seeds two drams, sweet Almonds from two drams to half an ounce; with a sufficient quantity of the Water of Water-lillies make an Emulsion. Add of Cinnamon-water half an ounce, and sweeten it with Syrup of Poppies. Or the Emulsion may be accommodated to whatever acute Distemper accompanies the Watchings; as, in a malignant Fever,

Take of sweet Almonds and Garden Poppey-seeds, of each two drams; of the four greater cold Seeds, of each a dram: With Viper-grass Water make an Emulsion: sweeten it with pearl'd Sugar, and add half an ounce of Cinnamon-water, and a scruple of Bezoar Mineral. It pacifies the Spirits, and obviats the Malignity of the Distemper.

The Decoction of Barley with Poppies and Liquorice is much applauded. And in general all moist, nourishing, milky, chylous Medicines, are very conducive in this case; especially the Seed of Thorn Apple; of the Fruit we make Pills thus:

Take of Thorn Apples six pound, bruise and boil them in twelve pints of Lettuce-water to eight pints; express the Decoction, and digest it in the Sun: sprinkle it with Spirit of Wine, and set it to dry. To an ounce of the Juice thus thicken'd and dry'd add half an ounce of Saffron, and two scruples of the Oil of Citron-peel. Make a Mass for Pills. Dose a grain or two. It procures Sleep, and stops all Fluxes.

In the Watchings of old Men, or such as proceed from a scarcity of Spirits, or a frigid Crudity in the Stomac, Opiats are inconvenient; comforting and aromatic Medicines being only proper.

Some give Opiat Clysters or Suppositories to procure Sleep; but 'tis a dangerous Method, unless the Watchings be accompany'd with a Looseness or Pains in the Guts.

Besides

Beſides the internal Uſe of moiſtening and quieting Medicines, ſome apply them outwardly to the Forehead, Temples, Feet and Hands. They foment and bathe the extreme Parts with the Decoctions of Anodyn and Emollient Vegetables, ſuch as Camomile, Night-ſhade, Water-lillies, &c. They apply Emulſions to the Forehead and Temples, or Liniments made of the Emollient Oils. *Sanctorius* affirm'd, that all theſe external Applications were of no uſe. *Primeroſius* was of the ſame Opinion.

CHAP. II.

Of Exceſſive Sleep.

Sleep is accounted *preternatural* when the Spirits do not repair to the external Organs in their wonted Seaſon, but continue lock'd up within the Brain. If a ſcarcity of Spirits, and extreme Weakneſs, occaſion a ſhutting of the Eyes, 'tis not proper Sleep, but Swooning: As in the caſe of hyſteric Fits and Weakneſs after Child-birth, there firſt appears as it were a violent inclination to ſleep, which preſently terminates in Swoonings.

If the Sleep be ſo profound, that the Perſon does not wake when jogg'd or call'd upon, but remains deſtitute of all Senſe and Motion, except Reſpiration, 'tis call'd a *Carus*; and if it proceed from any internal Cauſe, 'tis a ſort of Apoplexy, and requires the ſame Cure. The external Cauſes are exceſſive Drinking, ſmoaking Tobacco, uſing Narcotic Medicines, the Steams of ſulphurous Minerals or fermenting Liquors, or new Plaiſtering upon the Walls of the Houſe, and ſuch like.

When the Perſon doats in his Sleep, and readily anſwers upon a Call, but continues ſenſleſs, and preſently drops aſleep again, 'tis call'd a Sleeping *Coma*. If the Fancy be awake while the external Senſes are ſhut up by Sleep, and attended by frantic Outcries and irregular Motions of the Members of the Body, 'tis call'd a Waking *Coma*; which ſeldom comes alone, but is generally follow'd by Phrenſies and Convulſions, and diſappears upon their Removal.

Sometimes the ſtrength of Imagination is ſuch, that while the Perſon is aſleep, he not only ſpeaks and moves, but gets up and walks about, and attempts many fearful things, that when awake he would ſhrink to think of. This is rather a natural Infirmity, than a proper Diſeaſe. It is influenc'd by the

the Moon, and seems to be near akin to Hypocondriac Melancholy.

If the sick Person be seiz'd with a sleepy *Coma*, and withal a slow Fever, and a forgetfulness of what he does, speaks, or demands, 'tis call'd a Lethargy; which is the only sleeping Distemper that requires Consideration in this place.

The immediat Cause is the dulness of the Spirits. The remote Causes are, 1*st*, A Paucity of Spirits, occasion'd by Bleeding, Venery, Watching, Fatigue, *&c.* 2*dly*, A watry or pituitous Humour, separated from the Blood by the Glandules of the Brain, that blocks up the Passages and drowns the Spirits. Thus Children, hydropic and arthritic Persons, and those of a phlegmatic moist Constitution, are often-times obnoxious to this Distemper. The Stone in the Kidneys, or any thing that suppresses the evacuation of the *Serum*, will give rise to a Lethargy. 3*dly*, Narcotic Medicines, and sulphurous Liquors, or poisonous Fumes; which stupifie the Spirits, by making such alterations in the Humors of our Body, as are apt to produce a Numness. Thus the very Humours of our Body turn narcotic, and have the like influence upon the Spirits; as new Wine by fermentation acquires a stupifying Quality, which formerly it had not. 4*thly*, The stagnation of the Blood, Contusions, or Tumors in the Brain; which compress the Spirits, and straiten their Passages.

Sleep distinguishes these Distempers from all others. The particular Symptoms that distinguish one sleepy Distemper from another, may be gather'd from what is already said.

As for Prognostics: Sleep in general is a bad *Omen*, and is more or less to be suspected, according to the degree of sleeping. A *Coma* is very dangerous in the height of an acute Fever. If the Fever intermit, or be accompany'd by evacuations, 'tis less hazardous, unless it happen in the beginning. A Lethargy generally brings Death in seven Days: But if the sick Person survive the seventh Day, he recovers. If 'tis follow'd by Evacuations by Stool, by the Nostrils, the Ears, or salivating Glandules, 'tis a tolerable sign, especially if the Fever and other Symptoms relent. If the Symptoms are heighten'd, and the Body in the *interim* oppress'd by other Distempers, especially those of the Head, together with cold Sweats, 'tis a desperat Case. A Phrensie preceding a Lethargy, makes it mortal; whereas if it follow after, 'tis a sign of Recovery. If a Trembling succeed, it portends ill. If it come of its own accord, without the impulse of an external Cause, 'tis mortal.

In the Method of Cure, we muſt have regard to the remote Cauſes above-mention'd. If a Lethargy proceed from a prevalency of ſerous or pituitous Humors in the Blood, and conſequently in the Brain, Blood-letting is for the moſt part neceſſary, both by way of Averſion, Derivation, and Revulſion. It may be repeated according to the former ſtrength of the Patient. 'Tis better to bleed often, and draw forth but little at a time, than to take it all at once. In the beginning of a Lethargy from this Cauſe, 'tis not improper to inject the following Clyſter.

Take of Wormwood, leſſer Centory and Rue, of each a handful; Pellitory-roots three drams; Pulp of *Coloquintida* ty'd in a Bag, from half a dram to a dram; boil them in common Water: To nine ounces of the ſtrain'd Liquor, add Electuary of *Hiera* with *Agaric* one ounce; Ox-gall thicken'd a dram; volatil Salt of Amber half a dram, and the Yelk of an Egg (or, if you deſign to make it very ſharp, half a dram of Sal-gem) mix for a Clyſter. Or,

Take of *Aſarabacca* (or Tobacco) Leaves, the Herb Rue, the Flowers of leſſer Centory, Flowers of Arabian Stechas, of each half a handful; Briony and Gentian-roots, of each half an ounce; Pulp of *Coloquintida* ty'd in a Bag, a dram and a half; boil them in common Water, or human Urin: in ſeventeen ounces of the ſtrain'd Liquor, diſſolve Electuary of *Hiera* and *Agaric*, one ounce; Ox-gall thicken'd, a dram; Eſſence of Caſtor, two ſcruples: Make a Clyſter. Or,

Take of the Pouder of *Hiera* with *Agaric*, a dram and a half; Mice-dung, Ox-gall thicken'd, of each a dram, with a ſufficient quantity of Honey of Roſemary-flowers, or Honey of Rue: Make a Suppoſitory to be anointed with Oil of Myrrh or of *Coloquintida*.

If theſe prove ineffectual, 'twill be proper to apply a bliſtering Plaiſter; as, Take of the Pouder of Cantharides, from a ſcruple to two ſcruples; Pouder of Euphorbium, from half a ſcruple to twelve grains; Caſtor in Pouder, from fifteen grains to a ſcruple; with half an ounce, or an ounce of Capital Lees: Make a bliſtering Plaiſter to be apply'd to the Pit of the Neck, or behind the Ears, or to the Back of the Head, or to the Arms or Legs. 'Tis a very effectual Medicine in this Caſe.

If the Patient reap any Benefit by theſe Preſcriptions, then 'tis time to preſcribe Vomits and Purges. The Antimonial Vomits are beſt. As for purging Medicines,

Take

Take of *Quercetanus*'s *Extractum Phlegmagogum*, from half a ſcruple to a ſcruple; Caſtor, half a ſcruple; Troches *Alhandal*, two grains; Roſin of Jalap, one, two or five grains. With the Eſſence of Caſtor make Pills: To which you may add ſome ſweet Mercury.

Next to evacuating Medicines, we exhibit the ſharp Volatil Cephalics, which diſpel the ſerous Humour, and diſengage the Spirits; ſuch are Spirit of Sal-Armoniac, Spirit of Muſtard-ſeeds, Spirit of the Lilly Convally, Salt of Amber, and eſpecially Caſtor. The Decoction of Tea is much commended in all ſleepy Diſtempers. The ſharpeſt Cephalic Medicines are beſt. As,

Take of Marjoram and Rue-water, of each an ounce and a half; Apoplectic Water, ſix drams; Eſſence of Caſtor, a dram and a half; Spirit of Soot, two ſcruples; Syrup of Betony, one ounce. Mix, *&c.* Or,

Take of the Spirit of Mother of Thyme, Spirit of Citron-peel, of each a dram and a half; Spirit of Human Blood, one dram: Mix. Or,

Take of the Conſerve of Sage, Conſerve of Roſemary and Lavender-flowers, of each one ounce; the Pouder *Dianthos*, a dram and a half; Pouder of Cubebs, a dram; Muſtard-ſeeds and Caſtor, of each two ſcruples; with the Syrup of Piony-flowers make an Electuary.

If the Lethargy proceed from a Narcotic Virulency that has ſeiz'd the Spirits, then the Volatil Acids are moſt proper, eſpecially the Volatil Spirit of Vitriol, and the Volatil Spirit of Verdigreeſe: They are given from twenty to thirty Drops in any convenient Vehicle; to which Caſtor always ought to be added, it being an admirable Specific in theſe Caſes. When a Lethargy proceeds from this Cauſe, preſcribe thus,

Take of black Cherry Water, Mother of Thyme Water, of each an ounce and a half; *Mynſichtus* his Hyſteric Vinegar, or Vinegar of Squills, half an ounce; Eſſence of Caſtor, two drams; Oxymel of Squills, ſix drams: Mix, *&c.* Or,

After the uſe of theſe Medicines, the Cure may be compleated by the Sudorifice Decoctions of Woods, *&c.*

Next ſucceed the ſneezing and chewing Medicines, which evacuate by the Mouth and Noſe. To this purpoſe are the ſharp, pointed, irritating Medicines, which ought always to be mix'd with volatil Salts; that ſo while the one irritates and provokes to an evacuation, the other may penetrate and prepare the Humor. As,

Take Pouder of Tobacco, Pouder of Lilly Convally, of each a dram; white Hellebor-roots, a ſcruple; Caſtor, from twelve grains to a ſcruple; diſtill'd Oil of Marjoram, ſix drops: Make a Pouder to be blown into the Noſtrils thro' a Quill. Or,

Take of white Hellebor, Caſtor, white Pepper, of each a ſcruple; the diſtill'd Oils of Rue, of Marjoram and Sage, of each two drops: Mix and make a Pouder for the ſame uſe. This Preſcription was peculiar to *Timæus*. Or,

Take of Treacle of *Andromachus*, two drams; Extract of Caſtor, half a ſcruple; Pouder of Pellitory-roots, one ſcruple; diſtill'd Oil of Amber, ſix drops: Mix and make a Medicine for cleanſing the Palat.

To theſe we add the external Remedies. As,

Take of the diſtill'd Oil of Sage, half a dram; the diſtill'd Oils of Caſtor and of Amber, of each a ſcruple: Mix and make an Oil; with which anoint the Face and Temples. Or,

Take of Swallow-water prepar'd with Caſtor, two ounces; the Spirit of the Cryſtals of Verdigreeſs, two drams: Mix and foment the Face and Temples with it. Or,

Take of Vinegar of Rue, two drams; Spirit of Verdigreeſe prepar'd with Sulphur, two drams; Eſſence of Caſtor, a dram and a half: Mix, and uſe as before. Or thus,

Take of the Herbs Savory and Rue, of each half a handful; Zedoary, half an ounce; Juniper-berries, ſix drams; Laurel-berries, half an ounce; Muſtard-ſeeds and the Seeds of Water-creſſes, of each two drams; boil them in a ſufficient quantity of Vinegar, and foment the Face and Temples.

The Spirit of Vitriol and Vinegar applied to the Noſtrils, are of admirable uſe againſt feveriſh *Coma's*. As for the waking *Coma's*, a Cataplaſm of a freſh Horſe-radiſh-root beat up with Rue, Vinegar, common Salt, and a ſufficient quantity of Lees, may be applied to the Feet.

If the Lethargy proceed from Mercurial or Sulphurous Fumes, &c. let a Vomit be exhibited upon the firſt view; then apply Vinegar and Caſtor to the Noſe, and likewiſe give it inwardly. Or thus,

Take of Mint-water, of Rue-water, of Rue-vinegar, of each an ounce; Eſſence of Caſtor, ſix drams; Syrup of Mint, or of the Juice of Citrons, one ounce: Mix, and let the Patient take a ſpoonful often.

Where the immoderate uſe of Opium cauſes a Lethargy, Vinegar of Rue, or of Squills, or of Vitriol, mix'd with Caſtor,

ſtor, is a ſovereign Remedy; or if that prove ineffectual, add Muſtard-ſeed, or Rocket-ſeeds; or inject a Clyſter of Spaniſh-wine.

If any ſleepy Diſtemper enſue upon hard Drinking, let a Vomit be firſt exhibited; then foment the Fore-head and Temples with Vinegar, mix'd with the Juice of Smallage; or apply the Juice of Sengreen the greater, with Vinegar and Nitre, to the *Scrotum*. Spirit of Sal-Armoniac, or of Soot, are very ſerviceable in this Caſe.

Upon the whole, the Remedies made uſe of in a Lethargy muſt be particularly appropriated to the Cauſe that produc'd it. If it proceed from an exernal Cauſe, Vomiting and the uſe of Vinegar with Caſtor, will finiſh the Cure: If it owe its Original to an internal Cauſe, or be preceded by other Diſtempers, the Cure muſt be vary'd according to the reſpective Indications.

There is a near reſemblance betwixt theſe Diſtempers, and what we call a *Catalepſis*; in which the Patient is depriv'd of all Senſe and Motion, and ſeiz'd with a ſtiffneſs in his Members, tho' moveable by any external impulſe, and apt to remain in the poſture they're left in. It is an uncommon Diſtemper, and very ſurpriſing, being accompany'd with a ſtaring of the Eyes, and diſtortion of the Countenance.

The Cauſe is the coagulation and fixedneſs of the Spirits: it may remotely proceed from Cold, ſuppreſſion of the Terms, hypocondriac Fits, Worms, ſulphurous Fumes, and diſcontent of the Mind.

'Tis a dangerous Diſeaſe. As for the Cure, exhibit Antimonial Vomits, and apply ſharp Cataplaſms or Suppoſitories; Spirit of Wine is us'd in this Caſe both internally and externally.

SECT. II.

Of the Diſorders of the external Senſes.

EXternal Senſe proceeds from the influence of outward Objects upon the Organs, where the Nerves are inſerted. The Animal Spirits ought naturally to bend and extend theſe Nerves; ſo that when the outward Extremities are mov'd, the ſame Motion may readily be communicated to the Spirits

in the Brain. This ſecondary Motion of the Spirits within, occaſion'd by the Impulſe from without, is the Foundation of internal Senſe; by virtue of which we form Idea's exactly parallel to the Motion of the external Object. Thus, when the Arm is cut off, there often-times remains an imaginary Pain, as if deriv'd from the firſt Finger.

Theſe outward Senſes are five in number, among which that of Seeing is juſtly intitled to the nobleſt Character.

CHAP. I.

Of the Diſeaſes belonging to the Eyes.

THE Rays of Light are either convey'd to us in a direct Line from a luminous Body, or reflected from the Surface of a dark ſolid Subſtance. If this reflecting Body be ſmooth and poliſh'd, the Rays are return'd in the ſame condition and manner as they're receiv'd; if it be rough and unequal, they ſuffer various determinations according to the reſpective Figures and Texture of the Parts: from whence enſues the admirable variety of Colours.

Theſe Rays terminat in the *Retina*, where they form the inverted Image of the Object, after having ſuffer'd a *Decuſſation* in the Cryſtallin Humor; And the ſize of this imaginary Picture is augmented or diminiſh'd according to the proportional largeneſs of the Angles of *Interſection*.

The ſenſe of Seeing may be extinguiſh'd or diminiſh'd, when the Rays of Light have not a free acceſs to the Eye, as when the Eye-lids are ſeiz'd with a Palſie; which is cur'd by applying a Plaiſter of Tacamahac and Caran, or diſtill'd Oil of Tartar with Wax; or an Ointment of Balſam of *Peru* and *Aqua Vitæ*.

Sometimes the Rays are not admitted, by reaſon of a Web, or preternatural Tunicle covering the Eye: which proceeds from a corroſion of the Glandule in the internal corner of the Eye, by the ſharpneſs of the Serum, and ſome diſorder of the general Coat call'd *Adnata*. The nutritious Juice of this Coat, and the Serum ſeparated by the Glandule, being thus vitiated, congeal into a thicker Subſtance, which encreaſes by degrees, and at length covers the whole Eye. If the ſmall Blood-Veſſels, adjacent to the Glandule, be likewiſe vitiated, ſome ſtrokes of Blood appear in it, which is a ſign of Malignity; and if it be thick, rough, and painful withal, it approaches to a Cancer, and ought not to be meddled with. If it be thin,

clear,

clear, and white, 'tis a good Sign. If it be inveterat, or attended by a suffusion, 'tis safest not to touch it.

In curing the Diseases of the Eyes, the following Cautions are fit to be taken notice of. 1. That all sharp irritating Medicines are improper. 2. That they ought to be neither very cold nor very hot, but temperat. 3. That when the Humors are sharp, and apt to inflame the Part, Wine is not convenient. Tho', 4. when a cold Moisture prevails, Wine, Fennel, Eyebright, and especially the Decoction of Sassafras, are incomparable internal Remedies. 5. That drinking of Spaw-waters is very conducive in the end, tho' it seem to offend the Eyes at first. 6. That *Alcali's* are always proper. *Quercetanus* prepar'd an excellent Water, thus,

Take of Child's Urine, half a Pound; white Vitriol and Tutty of each four ounces; Juice of Celandin, two pounds; let them stand to digest for some Days; then distil and reserve the Spirit for use. Others thus,

Take of the Roots of Celandin the greater, and of Valerian, of each one pound; of the Herbs Rue and Eyebright, of each four handfuls; Aniseeds, Fennel-seeds, Lovage-seeds, of each two ounces, Marygold-flowers, Roses, Borrage-flowers, and Flowers of Comfrey the greater, of each four handfuls, and fifteen Crayfish; chop 'em all small, and pour upon them equal quantities of the weak Spirit of Vitriol, and Juice of Celandin: let them stand to digest for a Month, then distil, putting a dram of Camphyr in the Alembic; reserve one half for use, add to the other half two drams of *Crocus Metallorum*; let it stand for the space of two Hours, and then strain it. 'Tis an admirable Water for the Eyes. *Hartman's* Eye-water was thus prepar'd.

Take of Fennel-water, Anniseed-water, of each a pound. Dissolve in them half an ounce of the purest white Vitriol. Then infuse in it the Roots of Elecampane in Powder: Strain the Liquor, and reserve it in a Glass.

The best Method of using these liquid Remedies, is that the Patient be laid flat on his Back, and the Liquor dropp'd into the Eye; and then the Eye must be carefully cover'd.

Blistering Plaisters and Issues are very proper; as also a moderate use of sneezing Medicines.

To return to the Web upon the Eye. It ought to be remov'd either by resolving Medicines, or by the help of a Needle. And afterwards Astringents ought to be applied. In order to the former, Sugar-candy, Hony, burnt Harts-horn, Egg-shells, &c. are very proper either by way of

Pouder, or form'd into an Ointment. *Quercetanus*'s Ophthalmic Water is generally us'd. 'Tis this;

Take of Eye-bright-water, Fennel-water, and Water of Celandin the greater, of each an ounce; *Crocus Metallorum*, or Glass of Antimony, or Buttyr of Antimony, a scruple: let it stand warm for the space of two or three Weeks; then strain the Liquor, and drop it while warm into the Eye; for all cold things are hurtful to the Eyes. Or,

Take of Sal-gem a dram, dissolve it in Rose-water and Fennel-water, of each one ounce; mix for a *Collyrium*.

The Gall of a Pike and several other Fishes, also a Water drawn from human Gall, or from young Goose-dung, are by some reserv'd for Nostrums. The following Water is incomparable, and much us'd.

Take a Vessel of Brass; pour into it half a Pound of quick Lime Water prepar'd with Water of Comfrey-Royal; and add half a dram of Sal-Armoniac. Let them stand till the Colour alter.

The Juice of Celandin mix'd with the Dew gather'd from Fennel, or Eye-bright-water, is a great Specifick in this case.

As for Pouders, white Vitriol leads the Van. Sometimes they're diluted with Waters; as,

Take of white Vitriol, a dram; prepar'd Tutty, Sugar-candy, *Collyrium Albi Rhasis*, of each four scruples; Camphyr, six Grains; Rose-water, Vervain-water, and Water of the Flowers of Eye-bright, of each four ounces. Mix. 'Tis good for removing Inflammations, as the following is for taking off the Web.

Take of the Bone of a Cuttle, one scruple; Sugar-candy, one dram; white Vitriol, half a scruple; prepar'd Tutty, half a dram: Mix for a Pouder. *Riverius* pilfer'd this Prescription out of *Poterius*, and was not so just as to take any notice of its Author. If you please you may dilute it with Celandin and Royal Comfrey-water, of each one ounce.

Take of Blood-stone, half a scruple; white Vitriol, fifteen grains; Myrrh and Saffron, of each five grains; white Sugar-candy, one scruple; make a Powder; or mix it with some convenient Water, and apply it to the Web with a Feather.

If such Medicines prove ineffectual, we must have recourse to sublimat Mercury. *Plempius*'s wonderful *Arcanum* was this.

Take

Take of ſublimat Mercury from five grains to half a ſcruple, diſſolve in Roſe Water, Eye-bright Water, and Fennel Water, of each one or two ounces: Touch the Web with a drop or two of this Liquor every Morning and Evening.

The Juice of red Ants expreſs'd and drop'd into the Eye is of wonderful Succeſs.

Having thus conſider'd the firſt Obſtacle to the paſſing of the Rays of Light, the next is when the Horn Coat or White of the Eye is diſorder'd. This may happen, 1. When it is unequally nouriſh'd; or ſome Parts of it elated, while the others are depreſs'd, by reaſon of the Viſcidity of the nutritious Juice. 2. When white Scars remain in this Coat, after the Small-Pox or any other Ulcer. 3. When by an external Accident the Blood is forc'd out of its Veſſels, and creates an Inflammation.

The Signs are theſe. In the firſt caſe this Coat appears white and thick. In the ſecond we diſcover as it were a white Spot upon the Eye. The third is known by the blue livid Colour that attends it.

Children are more eaſily cur'd of theſe Maladies than adult People. If they are of a long ſtanding, 'tis a difficult matter to remove them; only the laſt is generally more tractable.

As for the Cure: The Viſcidity of the Chylous Juice, and the Scars upon the Coat, ought equally to be remov'd by attenuating ſharp Medicines; which ought to be ſomewhat ſharper in the latter than in the former caſe. The Seeds of *Clary* applied to the Eye, are converted into a Mucilage by the Lymph which waters thoſe Parts, and thus prove an incomparable Medicine in this caſe.

The Gall of a Pike or of a Partridge, and Ox Gall, or a Water diſtill'd from it, are much commended; they are us'd with the Water of Frog's-Spawn. If the Scars or Clouds in the Eye ſucceed the Small-Pox, apply what follows.

Take of Fennel Water two ounces, of the Gall of an Eel from a dram to a dram and a half, Sugar Candy in fine Powder a dram: Mix, and let them ſtand warm for the ſpace of a Night.

The Spirit of Urine diſtill'd with Vitrol, the Juice of Eye-bright or Fennel new drawn, mix'd with a little Balſam of *Peru*, or rather the Juice of Fennel, mix'd with Sugar of Lead, are very proper to this purpoſe.

The Liver of a Lamprey melted into an oily Liquor, is accounted a Specific: 'tis a ſharp Medicine, and ought only

to

to be applied to the Eyelids, unleſs the Malady be inveterat. The Scar may be gently anointed with Oil of Paper or burnt Rags, with a Feather, or with the white Water of Honey. If the Cloud or Scar be inveterat, take the yellow Water of Honey, or the following compound Water.

Take of Honey from the Combs two pound, tops of Elder Flowers, Eye bright and Fennel Tops, of each half a handful, Sugar Candy four ounces. Diſtil in a *Balneum Mariæ* with a ſtrong Fire.

The Juice of Celandin the greater, or of Rue, or of Brooklime or its Water, either drop'd into the Eye alone, or mix'd with Honey of Roſes, are of excellent uſe; As alſo the Water of quick Lime with Sal-Armoniack, as above preſcrib'd; or *Platerus*'s famous Experiment, eſpecially if the Serum be ſharp or apt to inflame the part, *viz.*

Take of the Pulp of four Apples half a pound; chop 'em ſmall, and boil them in Roſe-water and Fennel-water, to the Conſiſtency of a Mucilage. Then add two or three ounces of the Mucilage of Fenugrec-ſeeds, and two or three Yelks of Eggs, half a dram or a dram of prepar'd Blood-ſtone, and two drams of the Rinds of Pomgranats pouder'd. Mix and make a Cataplaſm, to be applied and continually kept upon the cloſed Eye, and renewed twice a day.

The Waters diſtill'd from Cichory Flowers, or Blew-bottle-flowers, according to *Schroder* and *Hoffman*'s Method; Fennel-water with the Gall of an Eel; the Powder of the Bone of a Guttle with white Sugar; the compound Powder of Crabs Eyes, and the Caſtcoats of a Serpent, either blown into the Eye, or diluted with a convenient Vehicle, are all noted Specifics.

But above all ſublimat Mercury is the moſt effectual Medicine, exhibited as above.

When Children are ſeiz'd with theſe Diſtempers, the Nurſe or Mother may chew a little Fennel-ſeed, and then breathe upon the Child's Eye, or touch it with her Tongue.

When the Eye is beat black and blew by an external Accident, apply Cloths dipt in Chervil-water, Hyſſop-water, or the Water of Blew-bottle-flowers. The chewing of Cumin-ſeed, or Fennel-ſeed, or Cloves, and then breathing upon the Eye, is a celebrated Remedy. Fomentation with Wine, in which the Tops of Hyſſop have been boil'd, is very ſucceſsful; but for a forlorn Hope take what follows.

Take of the Roots of Comfrey the greater, and of the leſſer, of each half a pound; Chamomile and Melilot-flow-

ers,

ers, of each two ounces; Meal of Beans, four ounces; fresh Butter, three ounces; Fenugreo-seeds, one ounce; Saffron, half an ounce: Boil them, and foment with the Decoction; which is better than a Cataplasm, by reason that all fat oily things offend the Eyes. Or,

Take of Blew-bottle-flowers, and Flowers of Comfrey-Royal, of each a little handful; tops of Hyssop, half a handful; Comfrey-roots, three drams; Roots of *Solomon*'s Seal, a dram and a half; chop and beat them small, and then boil them in a sufficient quantity of Wine. Add to two or three ounces of the strain'd Liquor two or three drams of Spirit of Wine camphoriz'd.

If there happen a Collection of Matter under this Coat, it must be drawn forth by the Hand of a Surgeon.

Sometimes little Blisters appear upon this and the *native* Tunicle, which are caus'd by the suppression of sharp Humours. They are cur'd by applying *Hartman*'s vitriolated Water, or a simple Solution of white Vitriol; or by blowing the following Pouder into the Eye.

Take of prepar'd Calaminar-stone, half a dram; prepar'd Tutty, half a scruple; Sugar of Lead, half a scruple: Mix, *&c.* If the Blisters are open'd, the Water of the Whites of Eggs is very proper.

Having thus dispatch'd the Disorders that may affect the Coats of the Eye, let us next consider those of the watry Humor.

The watry Humor is indispos'd when a viscid Matter is mix'd with it, and interrupts the Rays of Light. This is call'd a *Suffusion*. If the Matter harden into a Membran, 'tis call'd a Cataract. It generally sticks close either to the Horn, or Grape Tunicle, and seems to proceed from a preternatural Extention of its membranous Fibres. 'Tis always seated in the watry Humor, tho' it sometimes appears before the Coat call'd *Uvea*, and sometimes behind it.

If this Membran cover the whole Eye, the Sight is quite lost; if it cover but the half, the Objects appears half'd; if it exceed not the bigness of a small Point in the middle of the Eye, and the Circumference is left open, the Objects appear as if Holes were made in them. This last case is a true Suffusion.

The Signs are these: In the beginning the Patient complains of Flies, Smoak, Cobwebs, Filaments, and such like, before his Eyes; the Colour of Objects is alter'd; and they

ap-

appear either multiply'd, or in halfs, or cut asunder. Thus by degrees the sight is darken'd, and the Apple of the Eye grows dusky. Some are seiz'd with Cataracts all of a sudden without any preceding Signs. If the Colour of the Eye turn perfectly white, 'tis a compleat Suffusion.

As for Prognostics; a young Suffusion is curable by the use of Medicines, but an inveterat one is only to be cur'd by a chirurgical Operation. If Light when brought near be quite imperceptible, Surgery it self can afford no Relief. If the Eye affected be watry, and its Apple dilated while the other Eye is compress'd, 'tis some Incouragement for a manual Operation. If not, 'tis a desperate case. If the Cataract be not ripe, and come to a sufficient Consistency, it ought not to be touch'd with a Needle, for fear the division of it should disturb the watry Humor, or it should reunite and become more callous than before. If it be of a long standing, it sticks so close to the Coats of the Eye, that it cannot be separated without rending them. An ashy colour'd Cataract is generally ripe in five or six Months. But if white, it requires as many Years. If blew or green, 'tis incurable. If yellow, it must be taken in time, else it becomes hard like a Horn. If the Cataract appear perfectly white, it is a sign of Ripeness, and withal of its remarkable Thickness. In old Age a confirm'd Cataract from an internal Cause in one Eye portends the Invasion of another in t'other Eye; and if couch'd, it generally returns. If the Head-ach either precede or accompany a Cataract, 'tis an ill Omen.

In the Method of Cure, regard must be had to the degrees of the Suffusion; if the Patient be only molested with the appearance of Flies, Hairs, &c. before his Eyes, 'tis in its first degree. When these Filaments that cause such appearances are gather'd into a Membran, 'tis arriv'd at the second degree: If the Membran be so thick and confirm'd that there remains no manner of sight, 'tis finish'd to the last degree.

In the first degree Medicines are only proper. In the second they may likewise take place, but yield to manual Operation.

Internally we use Hog-lice, Eyebright, Vipers boil'd in Ophthalmic Waters, the Decoction of Woods, Celandin, Vervain, Fennel, Betony, and such like.

The external Remedies must be very penetrating; Antimonials are preferable to all others, by reason of an acid subtil Sulphur couch'd within 'em. As,

Take

Take of Glass of Antimony in Powder, from half a scruple to fifteen grains; infuse it in Water of Blew-bottle-flowers, Eyebright-water, and Fennel-water of each an ounce. Let them stand warm for the space of a Night; in the Morning strain the Liquor, and add six grains of Camphyr. Drop it into the Eye, while the Patient is laid on his Back. Or,

Take of the Eggs of Ants four ounces, and thirty Galls of Lampreys; mix and distil with a slow Fire. It yields a muddy Water, which ought to be strain'd and apply'd to the Cataract in the Evening.

The distill'd Water of human Dung, with the Gall of a Lamprey, and Sugar-candy dissolv'd in it, is much commended. Celandin the greater, and River-crabs half putrified and distill'd, yield an Alcalin Water, of excellent use.

If these Medicines prove ineffectual, we must have recourse to *Quercetanus* his Ophthalmic Water prepar'd from a Child's Urine, and Vitriol: to which the Juice of Celandin may be added.

The White of an Egg harden'd, and fill'd with white Vitriol and Sugar-candy, and hung up in a Cellar, melts into a Liquor, which if diluted with Eyebright-water, is of admirable use in this case.

The Spirit of Sal-armoniac sharpen'd with Quicklime is the most penetrating Spirit, and preferable to Spirit of Wine, in which we are wont to dip Rags, and apply them to the Eye.

Blistering Plaisters, Issues and Setaces are serviceable in the beginning, but are in no use in an inveterat Suffusion. In room of them we may then use what follows:

Take the Roots of Mezereon, and macerat them in Water in which Nitre has been dissolv'd, or in the Lees of Wine-ashes, and afterwards dry them. Make a little Hole in the Teap of the Ear with a Needle, and put some of this Root thus prepar'd into it, after the manner of an Issue. It drains a great deal of Matter from the Head and Eyes.

In an inverat case, 'tis probable a Salivation procur'd by Mercury may be serviceable. *Fonseca*, Mr. *Boyle*, and *Schenkius*, were of the same Opinion.

Besides the genuin Suffusion above-mentioned, we meet sometimes with a spurious sort, which ensues upon Hypochondriac Fits, long Fastings, and the Paroxysms of intermitting Fevers. It generally depends upon the Disorders of the Stomac, and often-times disappears upon eating, or at least is cur'd by stomachic Medicines, *viz.* Aloe, Mastic and Ginger.

A Cataract ought likewise to be carefully distinguish'd from what we call a *Glaucoma*, that is, when the Chrystallin Humor loses its Perspicuity, and assumes a grey dusky Colour. Old People are naturally obnoxious to it, by reason of their scarcity of Moisture. For if we take out the Crystallin Humor, and put it betwixt us and Objects, it magnifies them; but if we dry it or boil it in hot Water, it becomes thick and untransparent. 'Tis in vain to attempt the Cure in old Persons. If the Patient be young, we foment the Eye with Spirit of Wine, or a Cloth dipt in it, and apply'd to the Eye over Night. Or infuse Borrage or Bugloss-flowers in Spirit of Wine, and then use it. Some commend a Tincture of Bugloss extracted with weak Alum Water, and distill'd Water of the Whites of Eggs.

Thus much for the Obstacles which may embarrass the Passage of the Rays of Light. If the Patient be insensible of their Influence when they have a free Admission, the fault must lie in the Optic Nerve, and 'tis call'd a *Gutta Serena*.

Obstructions or Compressions of the Optic Nerve interrupt the Passage of the Spirits to the Eye, and so cause the Blindness. And a Tumor, or Collection of watry Humours in the Brain, or a violent Commotion occasion'd by a Fall, Sneezing, *&c.* An unseasonable Use of sudorific Medicines, or the Translation of a morbific Matter to the Head, may occasion this Disorder of the Optic Nerve within the Brain.

If nothing disturb it within the Brain, the Error must be lodg'd in its Expansion called the *Retina*, as when it becomes paralytic, languid, or otherwise indispos'd by a Blow upon the Eye, a Fall upon the hinder part of the Head, violent Sneezing, strong Convulsions, or a continu'd gazing on the Sun or full Moon, the Violence of whose Rays weakens and resolves the Fibres of the Tunicle. Colick Pains, and especially excessive Venery (a mortal Enemy to the Eyes) may produce the same effect. Child-bearing Women are sometimes seiz'd with this Disease, which disappears upon their Delivery. In like manner it is sometimes caus'd by a Suppression of the Terms, and vanishes upon their Return.

A *Gutta Serena* is distinguish'd from from the other sorts of Blindness by this; that these advance by degrees, according to the gradual Disorder of the part which causes 'em: Whereas it seizes on a sudden, and quickly arrives at its height. The Signs drawn from the Dilatation and Constriction of the Apple of the Eye are not to be credited.

This Diſeaſe is not eaſily cur'd. If the Nerves be tore, or the Sight quite gone, there is no hope. Old People never recover, for the Relaxation of the Optic Nerve is natural in them. If the Cauſe be moveable, and the Diſeaſe yet imperfect, there remains ſome ground of Hope.

Among the internal Medicines, thoſe which evacuat by Stool and Sweating are firſt in order. Vomits are not ſafe, nor ſtrong Purgations. The meekeſt Purgatives, ſuch as the Pills call'd *Aloephanginæ*, or the Decoction of *Senna* with Agaric and Salt of Tartar, are only proper on this occaſion. Or, they may be join'd with Alteratives, thus:

Take of the Herb Eye-bright, one handful; Betony-flowers, Flowers of Comfrey-royal, Blew-bottle-flowers, of each two little handfuls: Leaves of Senna without the Stalks, one ounce; Roots of black Hellebor, and of common Spurge the greater, of each two drams; Fennel-ſeeds, Cubebs, and Cardamoms, of each three drams; Salt of Tartar, one dram: Cut and beat them ſmall to be ty'd in a Bag, and infus'd in Wine. Of which exhibit a Draught to the Patient Morning and Evening.

Saſſafras and the ſudorific Woods are beſt for Sweating. As for *Alteratives*, the mild oily Aromatics which are tinctur'd with a gentle Bitterneſs, are only proper. All ſharp and fierce Medicines inwardly taken are very offenſive to the Eyes, as Onions, Garlic, Spirit of Sal-armoniac, Horſe-radiſhes, *&c.* Therefore they ought to be carefully avoided. Eye-bright and all its Productions are admirably good. Next to it are Valerian, Celandin the greater, Lovage, Fennel, Juniper-berries, *Carduus Benedictus*, Rue, the four hot Seeds, Elecampane and Roſemary. We uſe to tye them in Bags to be infus'd in Wine. The following Pouder is much approv'd.

Take of the Herbs Betony, Celandin the greater, Eye-bright, Lovage, Aniſeeds, Lovage-roots, Valerian-roots, and Cinnamon, of each a dram; Cardamoms, Ginger, Galangal, Fennel-ſeeds, Parſley-ſeeds, Seeds of Mountain-ſiler, and of the Herb wild Marjoram, of each half a dram; Sugar one ounce: Make a Pouder to be taken ſome time before eating, as likewiſe along with Victuals. Or,

Take of the Powder of Faulcons Dung dry'd, two drams; Fennel-ſeeds, one dram: Mix, for a Pouder to be taken every Day.

Innocent the Third was wont to do mighty Feats with an Electuary made of Fennel-ſeeds, the Seeds of Mountain-

tain-ſiler, Smallage, Dill, and Parſley-ſeeds, with Honey.

Ants, Earth-worms and Hog-lice, and their various Preparations, are very uſeful. Mr. *Boyle* commends the Infuſion of Hog-lice in Wine.

If a *Gutta Serena* proceed only from a want of Spirits, occaſion'd by Venery or exceſſive Evacuations, there is nothing ſo proper as a moderat Diet, and Food of eaſie Digeſtion.

As for external Applications, *May*-Dew gather'd from Fennel, Antimonial Infuſions, diſtill'd Waters from the Galls of Fiſhes or Gooſe-dung, are celebrated Remedies. The Liquor or Oil of the Liver of a Lamprey, the Fat of Vipers, and the Juice of Ants clarify'd by ſtanding, are all good. The Oil that melts from Earth-worms, Glaſs, and fermented Bread, is very effectual; it muſt be ſtrain'd thro' a thick Cloth, and ſharpen'd with a little Camphyr, and gently laid upon the Eye. *Brendelius* admires the following Ointment.

Take of Honey of Roſemary-flowers, ſcumm'd, Ginger in Pouder, Cloves pounder'd, and common Salt, of each half an ounce: Mix them for a liquid Ointment; of which put about the bigneſs of a Muſtard ſeed into the Eye: It will make it ſmart at firſt, but is a very innocent Medicine.

Chewing and Sneezing Remedies are likewiſe not improper. Bliſtering Plaiſters may be applied behind the Ears, or to the Pit of the Neck, or to the Head it ſelf; and Iſſues or Setaces may be cut in the Neck.

CHAP. II.

Of the Diſorders of the Ear.

THe Senſe of Hearing is occaſion'd by the Motion of the Air in the Ear; and is rendred agreeable or diſagreeable, violent or flat, according to the Proportion of the Air's impulſe upon it, which is communicated to the Brain by a particular Nerve, ſet apart for that purpoſe. This Nerve detaches a ſmall Branch to the Teeth, which occaſions the Sympathy that is obſerv'd upon the approach of any ungrateful Sound.

This Senſe is ſometimes weaken'd or quite loſt, and ſometimes vitiated. The former may be caus'd by malignant, acute or chronical Diſtempers, and is taken for a good ſign in Fevers. It inſues upon the cutting off or wounding of the external part of the Ear; which Defect is in ſome meaſure

ture supplied by holding one's Hand or some artificial Instrument in its place. It may be caus'd by an Obstruction in the Passage for Hearing, or a Disorder in the Membran which preserves the Nerve and internal part of the Organ from external Injuries. This Membran may be injur'd by violent Sounds, Ulcers in the Ear, or a Redundancy of Serum in the Brain, which unbends it, and so indispose it for receiving the Impression of the Air. It becomes sometimes paralytic, and liable to Convulsions, and is often-times affected by the Disorders of the Stomac.

If the animal Spirits have not a free Passage in the hearing Nerve, Deafness will insue. Their Passage may be disturb'd by a wrong Insertion of the Nerve, by a Compression or Obstruction, occasion'd by external Accidents or Defluxions within, or by the above-mention'd Disorders of the Membran, which is nothing else but the Expansion of the hearing Nerve.

Deafness is manifest of it self. The greatest difficulty is to distinguish the Causes, which must be indeavour'd by inquiring into the Patient's Constitution, the Accidents that preceded, and the Passions or Disorders which accompany it.

In the business of Prognostics, we must have regard to its Companions. If it succeed to a chronical Distemper, or becomes a formal Disease by it self, 'tis a difficult Matter to remove it. In acute Diseases, if the Urine remain crude, and the Person is seiz'd with a Deafness, it portends Doating. If it be accompany'd with the signs of Concoction, it signifies the Solution of the Disease. If attended by a Perturbation of the Eyes, a Heaviness in the Head, and a Distention of the lower Belly, it bespeaks a Bleeding at the Nose; especially if the Patient be apt to rub it. A Deafness succeeding to Doating, is a better Circumstance than if it went before.

As for the Cure. In acute Diseases it disappears upon the Solution of the Disease; or if it continue longer, is cur'd by Cupping behind the Ears, or smoaking Tobacco, or putting into the Ears a little Cotton dipp'd in *Aqua Anbaltina*. If it subsist by it self, without any dependance upon other Distempers, the Cure must be accommodated to the Cause that produces it. If it arise from an Obstruction in the Passage, occasion'd by the hardening of the Ear-wax or otherwise, 'tis cur'd by injecting the Juice or Essence of Wormwood, or Child's Urine, or the Spirit of Urine unrectify'd. If it proceed from other internal Causes, a tender regard must be had

to the Drum and hearing Nerve, by preſerving their due Order with aromatic and nervous Medicines. In a catarrhous Caſe give internally what follows:

Take of the Eſſence of Roſemary-flowers, of St. *John*'s Wort, and of Saſſafras, of each two drams: Mix, &c.

Amber given inwardly, or apply'd to the Ear with a little Cotton, is an admirable Medicine for old People. Moſch or Civet, or Balſam of *Peru* diluted with Spirit of Wine, or *Origanum* Water diſtill'd with Wine, or the Water of *Carduus Benedictus* rectify'd by frequent *Cohobation*, are all us'd externally the ſame way. If Deafneſs be attended by a remarkable Heat in the Ears, the Water that drops from one end of a piece of Aſh-wood, while t'other is put into the Fire, or the Water of Ants, or the Water diſtill'd from Flies, or Magpye-water with Caſtor; or the Juice of Radiſhes, or Onions, mix'd with Oil of Amber and Oil of bitter Almonds; are all applauded Remedies; and to be us'd with Cotton, or a Linnen-cloth.

Above all, the penetrating Aromatics, as Spirit of Treacle, The Eſſences of Wormwood and of Cloves, &c. are preferable. Human Gall, or the Galls of other Animals infus'd in Spirit of Wine, are much commended. Or,

Take of Ox's Gall and Spaniſh Wine, of each equal quantities: diſtil from them a Liquor to be dropp'd into the Ear, or applied upon Cotton or Linnen-cloth.

Take of the Roots of black Hellebor, half a dram; Roots of aromatic Calamus, two ſcruples; Pulp of Coloquintida, a ſcruple; Bay-berries, a dram; Cummin-ſeeds, from two ſcruples to two drams and a half. Cut and beat them ſmall, and infuſe them in four ounces of Spirit of Wine: and uſe the ſtrain'd Liquor as above, or ſharpen it with Eſſence of Amber.

All Preparations from Ants are of wonderful uſe in this caſe. As,

Take of the Eggs of Ants, an ounce, and ſix Galls of Hares; beat them up with a double Quantity of Hony, and then drop it into the Ear. Or,

Take twenty of the little white Worms that are found betwixt the Bark and Wood of an Oak-tree. Let them boil in two ounces and a half of the Oil of unripe Olives. Then take the Root of Sowbread, and cut it hollow. Fill the hollow ſpace with the Oil of theſe Worms, and add of prepar'd Pellitory-roots, and of the Roots of aromatic *Coſtus*, from half a ſcruple to a ſcruple; Oil of *Coſtus* or of Rue as much

as it can hold. Close up the Root and roast it under the Ashes; then bruise it in a Mortar, and with force express the Juice; and pour some Drops of it into the Ear every Day for ten Days together. *Timæus* and *Heerwodius* recommend it for an incomparable Remedy.

The Fat of Serpents or of Vipers, or the Fat that drops from roasted Eels, are proper in this case, and may be mix'd with the Oil of Amber or Aniseeds.

Some commend a Fumigation of the Ears from a mixture of Sal-armoniac, Oil of Tartar *per Deliquium*, and a double quantity of Quicklime with common Water.

After the application of these external Remedies the Ear ought always to be stopp'd with Cotton, and Amber or Musk upon it; and the Patient must lie upon the sound Ear, that so the Virtue of the Medicines may penetrat the more. Besides, 'tis to be remark'd, that oily viscid Medicines are not so mild as those of a thin spirituous Substance; and that they ought never to be applied till the Ear be purg'd and wip'd clean. All Medicines thus applied must be just lukewarm, and two or three Drops may always suffice for one time.

If Deafness come by Fits, or depend upon a catarrhous Disposition of the Brain; just before the Invasion of the Paroxysm, 'tis proper to apply to the Crown of the Head a Cloth dipp'd in apoplectic Spirits or Oils.

If it be occasion'd by a vehement Noise, 'tis not amiss to apply hot Bread from the Oven with Juniper and Bay-berries bak'd into it. Or,

Take of the Herbs Marjoram, Sage, Rosemary, and the Flowers of red Roses, of each half a handful; Juniper-berries, one ounce; Cummin-seeds, half an ounce; chop and beat them small, and stitch them into a Bag, to be applied hot; or wet with a convenient Vehicle.

A Fumigation receiv'd at the Ear from a Decoction of Filings of Steel, with distill'd Vinegar and cephalic Herbs, or from the Flowers of Sulphur, is much esteem'd. After the Fumigation is over, apply to the Ear distill'd Oil of Fennel with Cotton.

In chronical or catarrhous Cases the hot Baths are very proper, both for Bathing and Pumping upon the Head. An Issue cut in the Arm of the same side with the affected Ear, is likewise very useful on this occasion.

If Deafness be caus'd by a Fall, Contusion, or external Violence, distill'd Sowbread-water is a proper Remedy;

and a Plaister made of equal Quantities of Tacamahac and Cerecloth of Betony may be applied to the Head shav'd. Hot Urine taken from a hunted Hare is commended by some.

If any Obstruction or such like Cause give rise to a Deafness, 'tis probable a Salivation procur'd by Mercury may be useful. But 'tis a desperate Cure, and must be cautiously undertaken.

Thus I've dispatch'd the first Branch of the Disorders of the Ear; the next is when the Sense of Hearing remains, and the Patient is molested with a Tingling or Noise in his Ears. It proceeds from a preternatural Motion of the internal Air contain'd in the Cavity of the Ear, which affects the Fibres of the Drum, and so represents an imaginary Sound.

This Motion may be occasion'd by subtil foreign Fumes exhal'd from the Blood in the adjacent Arteries, which disturb the Repose of the internal Air, or by the irritation or violent misplacing of the Drum from any internal or external Cause. Convulsions of this Membran may be occasion'd by the Inflammation of the Blood in a Head-ach or Fever, and in that case vanish upon bleeding at the Nose: Or by a Catarrh, or Translation of morbific Matter, as in the declension of Fevers, &c.

If a Tingling in the Ears accompany other Distempers, it affords the same Prognostics as Deafness. If it subsist by it self, it is not very dangerous, unless it be inveterate, in which case it proves a Fore-runner of an Apoplexy. If it proceed from frequent Blows, it terminates in a total Privation of Hearing.

The Cure is perform'd by the same Medicines as above-mention'd; especially Fumigations, and the Application of aromatic Spirits and Oils.

Take of the Leaves and Flowers of Chamomil, one handful; Dill or Sage, Marjoram, Rosemary, of each half a handful; Millet-seeds tosted, an ounce; dry'd Salt, half an ounce; chop them small, and make a quilted Bag, to be applied warm to the Ear.

The Vapor of new Bread from the Oven, with Cummin-seeds, Fennel-seeds, Aniseeds, Origanum, Mother of Thyme, and Bay-berries, fermented and bak'd with it, is sometimes useful, but not always. The Oil of Oak-worms above prescrib'd, or expres'd Oil of Peach-seeds, with Peach-flowers infus'd in it, are very proper. Or,

Take of the Roots of white Hellebor, three drams; Bay-leaves and Rue, of each half a handful; Ash-leaves, one handful;

ful: Boil them in Oil of Bitter Almonds, or of Nuts with White or Spaniſh Wine, till the Wine be conſum'd. Expreſs the Oil, and apply it to the Ear. Or infuſe the Simples in Spirit of Wine, and extract an Eſſence for the ſame purpoſe.

Fumigation from a Decoction of Muſtard-ſeeds in Wine, is commended. In a pituitous Conſtitution apply what follows:

Take of the Oil of Henbane, and of Rue, of each half a dram; diſtill'd Oil of Marjoram, half a ſcruple; Caſtor, ſix grains; Saffron, four grains: Mix, &c.

If it proceed from a Fall, Contuſion or external Violence, take a ſpoonful of the Spirit of Scurvy-graſs, and half a ſpoonful of freſh Juice of Onions, and four or five drops of diſtill'd Oil of Spike. Mix, and drop it into the Ear.

In plethoric and young Perſons 'tis not amiſs to breathe a Vein in the Arm, and exhibit ſome mild ſneezing Medicines. If it come by Fits, follow the Courſe preſcrib'd above. If it attack hypochondriac Perſons, it generally proceeds from the Diſorders of the Stomac and lower Belly, and is cur'd by Chalybeats, Carminatives, and volatil urinous Salts, together with the uſual Specifics.

CHAP. III.

Of the Senſe of Feeling, and the Diſorders 'tis obnoxious to.

THE third Senſe is that of Feeling, occaſion'd by the Influence of external Objects upon the nervous Glandules ſeated in the Skin. 'Tis true, the nervous Fibres within the Body that are not glandulous, are deeply ſenſible of the lighteſt touch; but their Senſe is painful and preternatural, whereas that of the Glandules is equal and agreeable to Nature. Upon which account Feeling is their peculiar Property; and the Liver which has no Nerves or nervous Glandules is deſtitute of that Senſe.

This Senſe is quite extinquiſh'd in Apoplexies, Palſies, and ſtupifying Diſeaſes. Of which more in their proper places.

The moſt remarkable Depravation of the Senſe of Feeling is what we call *Pain*; that is, when the Object makes ſuch a ſenſible Impreſſion upon the Organ, as to provoke the animal Spirits to irregular Motions, and diſturb the repoſe of

the nervous Fibres, which readily impart their Disorder to the Brain. It may be call'd a convulsive Motion of the Fibres; and Experience teaches us, that Convulsions and Pain are reciprocal Causes to one another.

ART. I.

Of Pain in general.

THE remote Causes of Pain are innumerable, for every particular Object has a peculiar way of affecting the Nerves. The external Causes are manifest: The internal Causes are generally the Off-spring of vicious Acids; which partake of sharp and stiff Parts, that are apt to make painful Impressions upon the nervous Fibres. This Acid for the most part owes its being to some defect in the Stomac and first Passages; and varies the Nature of the Pain according to its changeable Circumstances. If a volatil sharp Acid be join'd to a viscid Vehicle, it takes deep rooting in the Part, and creates immoveable Aches, as in venereal and cholic Pains. If the Acid be more gentle, and join'd to a thin Vehicle, it produces a moveable floating Pain. If it proceed from a particular defect in the Part affected, 'tis apt to return and cause Relapses. According as this Acid is dispos'd, the Pain is either continu'd or intermitting; it either observes set Periods, or attacks indifferently in all Seasons. And sometimes it causes Swellings, by contracting the Fibres, and straitning the Pores of the Part, so as to put a stop to the Circulation of the Blood.

In order to form a distinct Idea of Pain, I shall divide it into ten sorts. The first is a weighty burdensom Pain arising from a Collection of insipid or viscid Matter lodg'd in a less sensible Part, as the Swelling of the Liver. 2. A pungent Pain arising from a sharp pricking Acid in a membranous Part, as in a Pleurisie. 3. A pointed penetrating Pain, resembling the Sense of a Hole made by an Aul, proceeding from a viscid Matter that partakes of acidity: As in St. *Anthony's* Fire and arthritic Pains. 4. A beating Pain which generally keeps pace with the Pulse of the Artery. It proceeds from a violent Distention of the Fibres, which are exasperated by the Incursion of the Blood; as in Head-aches, or when one's Finger is prick'd by a Thorn, &c. 5. A breaking Pain, peculiar to the *Periosteum*, resembling the breaking of the Bone. 'Tis produc'd by a sharp Acid lodg'd

in

in a tenacious Matter; as in venereal Cases. 6. A rending or distending Pain. The former is peculiar to hypochondriac Persons, and Parts that have no exquisit Sense, but are invested with a sensitive Membrane. The latter is caus'd by Wind, or any thing that overcharges the Part, and stretches the surrounding Membran. 7. A tearing Pain peculiar to the Membranes, and frequent in scorbutic Cases. 8. A burning Pain, peculiar to Fibres and Membranes, arising from a volatil Acid, and the boiling of the Humors within the Part. 9. A stupid chilly Pain. And, 10. A biting gnawing Pain.

If Pains be accompany'd by an intermitting Pulse, 'tis no just Cause of Fear; for when the former disappears, the latter returns to its wonted Order.

There are three sorts of Medicines made use of for Pains. 1. All Alcali's apt to destroy a prevailing Acid: As Wormwood, Dill, Elder, Mint, Chamomile, Bay-leaves, Pellitory of the Wall, and the other softening Herbs; Fumigations with Amber, or the Spirit of Amber both inwardly and outwardly. The volatil Remedies prepar'd from human Urine, and the Parts of Animals, are all proper Antidots against a volatil Acid. As for example:

Take of *Aqua Arcuelatis* (for external use) from an ounce and a half to two ounces; Spirit of Urine or Spirit of Sal-armoniac prepar'd with Quicklime, six drams; putrify'd Earth-worms, or Earth-worms mix'd with a volatil Salt, two or three drams: Mix and bathe the Part affected. Or,

Take the Leaves of Tobacco, of Sage, of Rosemary, of each one handful; Angelica-roots, half an ounce; Roots of Cuckow-pint and Pellitory of *Spain*, of each two drams; Rosemary-flowers, Lavender-flowers, and Flowers of Arabian Stechas, of each two little handfuls; Rocket-seeds, six drams; Castor, three drams; pour upon them two Pints of Spirit of Wine, and one Pint of the Spirit of Earth-worms. Let them stand warm for some Days in a close Vessel: And then strain the Liquor to be us'd as above.

Venice-Soap dissolv'd in Spirit of Wine is good for arthritic Pains. In case of a burning Pain it ought to be mix'd with Water of Frogs-spawn or Spirit of Wine with Camphyr and Saffron. Camphyr, Oil of Frogs, and the Oil of the Juice of Dwarf-elder, and all emollient Oils, are convenient in arthritic Pains. *Paracelsus*'s Oil prepar'd from *Galbanum*, with Turpentine, and Oil of Spike, and the Oils distill'd from Aromatic-seeds, from the Bones and Fat of Ani-

mals, or from Wax, digested with Spirit of Wine, are celebrated Medicines in all Pains arising from an Acid. Or,

Take of Balsam of *Peru*, one ounce; dissolve it with the Yelk of an Egg, and add three ounces of the Spirit of Juniper-berries, or of Elder-flowers: Mix for external Unction.

The Gums and Plaisters prepar'd from 'em are proper in the case of a viscid Acid. And likewise Cataplasms of human Dung, or the Dung of Animals with Oil of Roses. Among Purgatives in this case sweet Mercury is the best. And Sudorifics are the best internal Medicines.

2. All anodyn pacific Medicines are us'd for Aches. As Milk, Emulsions, Mucilages or Oils of softening Herbs, Cataplasms made of white Bread, Milk and Saffron. Or,

Take of the Crum of white Bread a sufficient quantity, let it soak in Cows-milk; Mix it with Yelks of Eggs and fresh Butter, and an ounce and a half of the Oils of Chamomile, Dill, white Lillies and Earth-worms. Apply it to the Part affected with a warm Cloth. Swallow-water, with Castor, Liniments of the Fat of Animals, and emollient Oils, and all oily softening Liquors or Ointments, are all proper for external use.

3. Narcotic Medicines stupifie the Part, and so lessen the Sense of Pain. But where a viscid Acid prevails, they are inconvenient. In case of a sharp Serum they are not amiss. As,

Take of the hypnotic Ointment, two drams; express'd Oil of Nutmegs, two ounces; Oil of Henbane-seeds, one ounce: Mix. Or,

Take of Oil of Dill and express'd Oil of Poppies, of each a dram; Oil of Henbane, half a dram: Mix.

The Oil of the Seeds of Henbane mix'd with Camphyr, Saffron, and Spirit of Wine; then cover'd with fermented Dough, and bak'd in an Oven; yield an incomparable Liquor for Pains of the Legs.

ART. II.

Of the sharp tearing Pains in the Joints.

THese Pains are frequently met with in Scorbutic Cases. They proceed from a subtil Acid fix'd in membranous and musculary Parts: And generally rage more by Night than by Day.

Blood-

Blood-letting sometimes gives Relief. Blistering Plaisters conveniently applied, and Issues, are often-times not improper.

The volatil Sudorifics, Decoctions of Woods, and all volatil alcalin Salts, such as we call Antiscorbutic, together with anodyn Absorbents, *viz.* chalybeat and antimonial Preparations, are proper to be given inwardly.

Take of the Roots of Swallow-wort, an ounce and a half; Myrtle-leaves, one handful; Seeds of St. *John*'s Wort, and choice Rhubarb, of each a dram and a half. Boil them in common Water, and in six ounces of the strain'd Liquor dissolve an ounce and a half of the Syrup of Maidenhair. Mix and give it inwardly. Or,

Take of the Shavings of Juniper-wood, three ounces; Sprouts of a young Pine-tree, two handfuls; of the Herb Rosemary, one handful. Infuse them in six Pints of fair Water, and let them stand over Night in a *Balneum Mariæ*. In the Morning boil it to four Pints, and give it for a Draught. It has a peculiar Virtue in the Obstructions of the Glandules about the Head and Chops.

External Medicines must be cautiously us'd; fat unctuous things are hurtful.

Take of the Spirit of Lilly of the Valley, (not much rectify'd) four ounces; Spirit of Sal-armoniac prepar'd with Quick-lime, two ounces; Essence of Castor, half an ounce: Mix for external use. Or,

Take of *Aqua Arcuatis*, (for external use) an ounce and a half; Spirit of Sal-armoniac, six drams; Spirit of putrify'd Earth-worms, three drams: Mix and apply with a warm Cloth. Or,

Take of the Leaves of Tobacco, Leaves of *Origanum*, Flowers of Elder, of each one handful; Roots of Angelica, an ounce; Roots of Cuckow-pint, and of Pellitory of *Spain*, of each two drams. Flowers of Arabian-Stechas, of Lavender and of Lilly-Convally, of each two little handfuls; Rocket-seeds, six drams; Castor, three drams. Infuse them in two Parts of Spirit of Wine, and one part of Spirit of Earth-worms. Let 'em digest for some Days. Strain the Liquor for use.

Venice-Soap dissolv'd in Spirit of Wine, and volatil Spirit of Tartar; Cataplasms of Comfrey-roots, and the use of hot Bathes; are much commended.

ART.

ART. III.

Of the Toothach.

THE Toothach proceeds from an acid Humor that corrodes the Membrane ſurrounding the Tooth. Sometimes the nutritious Juice of the Teeth is vitiated, and cauſes the Pain. Sometimes an acid Humor is diſtill'd from the neighbouring Glandules, or collected in the Cavities of the Bones of the upper Jaw under the Eye, and gives riſe to it.

This Corruption of the Humor ſometimes runs to that height, that the Subſtance of the Teeth is eaten away, and little Worms ingendred in 'em.

The Membrane is the original Seat of the Pain, which often-times ſeizes the whole ſide of the Head, attended by an Inflammation of the Jaw, or a Swelling of the Face. For the nervous Fibres being contracted in Sympathy with the Membrane, the Paſſages of the Blood and other Juices are ſtraitened.

The remote Cauſes are a Depravation of the Juices of the Body, and conſequently of the nutritious Juice of the Teeth, as in ſcorbutic and venereal Caſes; the uſe of acid Liquors, Sugar, or Honey, which ferment and acquire a notable Acid, very prejudicial to the Subſtance of the Teeth.

The Toothach is not dangerous of it ſelf; but may be follow'd by Convulſions, Inflammations, Tumors and Ulcers.

If the Tooth be corrupted, it muſt be drawn. If it proceed from a ſcorbutic Cauſe, Antiſcorbutics muſt be added to the Remedies exhibited. If from a venereal Cauſe, the Decoction of Guajacum, or its Oil, muſt be us'd.

As for the common Remedies, ſome uſe Decoctions of Herbs: For inſtance,

Take of the Herb Arſmart, Mother of Thyme, of each an handful; Dock-roots, Nettle-roots, of each an ounce; Pellitory (of *Spain*) Roots, the Shavings of Boxwood, the Shavings of *Lignum Sanctum*, of each half an ounce; Seeds of white Henbane, a dram. Boil them in a ſufficient quantity of Water. Strain the Liquor for a Gargal.

Heurnius commends the Decoction of Tobacco with Chamomile-flowers. Or,

Take of black Pepper, Roots of Pellitory of *Spain*, Seeds of Staveſacre, of each an equal quantity: Boil them in Wine, and uſe it for a Gargal. Or,

Take

Take of Juniper-gum, (or the Flowers of Spikenard) one ounce; boil it in a pint of Wine, for the same use. Or,

Take of the Extract of *Guajacum*-Wood, three grains; *Laudanum Opiatum*, two grains; distill'd Oil of *Origanum*, or of Cloves, two drops. Make Pills to be put into the hollow Tooth. Or,

Take of *Laudanum Opiatum*, one scruple; Oil of Camphyr, Oil of Cloves, of each five drops. With some convenient Balsam, make a Balsam to be applied to the Tooth.

If the Face be inflam'd, apply a Plaister of Triacle to the Cheek. Spirit of Sal-armoniac prepar'd with Spirit of Wine and Quicklime, with Camphyr dissolv'd in it, applied with Cotton to the Tooth, gives present Relief. The Essence of Sassafras prepar'd with Spirit of Wine is very proper: But above all the Essence of *Benzoin*. *Elixir Proprietatis* prepar'd without an Acid is often-times useful. The aromatic distill'd Oils (especially of Savin) mix'd with Oil of Henbane, are preferable to Essences. *Sulphur Auratum Antimonii*, Oils of Amber, Hazel, Boxwood, &c. are sometimes successful.

The Surgeons are wont to apply Plaisters to the Temples, or the following Plaister to the whole Part inflam'd:

Take of Triacle of *Andromachus*, Tacamahac, of each half an ounce; Balsam of *Peru*, a dram. Spread it upon a Linnen-cloth for use. If the Toothach cause an Inflammation like to St. *Anthony*'s Fire,

Take of Triacle of *Andromachus*, from half an ounce to six drams; Salt of Wormwood, Balsam of *Peru*, of each a dram: Mix and apply. If it be attended by a Swelling of the Jaws, 'tis not fit to provoke 'em to Suppuration. But,

Take of Chamomile-flowers, Elder-flowers, of each a handful; Roots of Florentin-Orris in Pouder, half an ounce: Mix 'em with express'd Oil of Poppies; make a quilted Bag, and apply it hot to the Part affected.

Sometimes indeed there happens a little Tumor in the Gums, at the very Root of the Tooth, which ought to be suppurated by warm Milk or roasted Figs, and afterwards kept clean with Honey or the like.

If the Toothach be inveterat, and do not yield to the ordinary Medicines, 'tis necessary to purge with Jalap, and let Blood, and apply Cupping-glasses to the Neck and Shoulders.

If the Tooth be corrupted, it must be drawn with a proper Instrument. Before drawing 'tis not amiss to apply the following Ointment in order to loosen the Tooth.

Take

Take of Gum-ammoniac, Seeds of Henbane, Juice of Henbane, of each a dram and a half: With the Fat of a green Frog, and a little Wax, make an Ointment.

In the caſe of Worms in the Teeth, the Decoction of Savin in Wine is proper. If the Tooth be rotten, an actual or potential Cautery will prevent its further corruption.

ART. IV.

Of Aches in the Eyes.

AN Inflammation, or the ſharpneſs of the Serum, or external Accidents, may cauſe Pains in the Eyes. If any external thing lurk in the Eye, it muſt be taken out by putting a Seed of Clary, or a little Pearl, or Crabs-eyes, into it. If the Pain proceed from a ſpontaneous Inflammation, the Mucilage of Seeds of Quinces extracted with Water of Frogs-ſpawn, adding five or ſix grains of Camphyr and as much Saffron to three ounces of Mucilage, ought to be laid upon the Eyes.

Fennel-water with Sugar of Lead and Camphyr is likewiſe proper. Or,

Take of the Water of Celandin the greater, Water of Blew-bottle-flowers and of Larks-ſpur, of each one ounce; white Vitriol, twelve grains; ſtrain the Liquor, and add half a ſcruple of prepar'd Tutty; to be applied to the Eye with a Linnen-cloth.

Of all external Applications, the following Cataplaſm is the beſt.

Take three ſweet Apples boil'd and ſqueez'd, and roſted under the Aſhes, and the White of one Egg well mix'd with two drams of Loaf-ſugar, and twelve grains of Camphyr, with five grains of Saffron: Mix for a Cataplaſm to be laid upon the Eye. Some recommend the opening of an Artery in this caſe.

Sometimes we meet with a preſſing, tearing Pain, which comes in an Evening without any evident Cauſe, and ſeems to proceed from the Convulſions of the Coats of the Eye. In which caſe antimonial Infuſions are proper. Or,

Take of the Mucilage of Plantan-ſeeds, Quince-ſeeds and Clary, extracted with Water of Frogs-ſpawn, of each one ounce; Saffron, ſix grains; Camphyr, four Grains.

Sometimes arthritic Pains are uſher'd in by a Pain in the Eye-lids, which may be cur'd by applying a bliſtering Plaiſter behind the Ears.

ART. V.

Of Pains in the Ears.

THE Pains of the Ears are for the most part occasion'd by the Disorders of the internal Membran; by Inflammations, and the Corrosion of sharp Humors, or of Worms either ingendred in the Ear, or receiv'd from without.

An Inflammation is very dangerous, and attended by a remarkable Heat that is not observ'd in the case of sharp Humors. Worms are distinguish'd by an Itching and Sense of Motion within the Ear.

As for cure, the following Cataplasm is universally applauded.

Take an Onion rosted under the Ashes, with an ounce and a half of Oil of Chamomile, and half an ounce of Oil of Dill, with as much fresh Butter, and a scruple of Saffron. It is a sovereign Remedy for the Inflammations that follow the Toothach.

The softening Oils, Infusions of Tobacco, or the Smoak of it, convey'd into the Ear, and especially the Oils of Insects, are all very proper. As,

Take of the Oil of Scorpions, one dram; Oil of sweet (or bitter) Almonds, distill'd Oils of Aniseeds and Caraways, of each half a scruple. Pour it hot into the Ear, or apply it with Cotton.

In the case of an Inflammation; Take of the Juice of Houseleek; Oils of Scorpions, of Earthworms and of Chamomile, of each a dram: Mix and use as above.

If there be no suspicion of an Inflammation, the distill'd vegetable Oils of Origanum, *&c.* are proper. Or,

Take a hundred of the largest Eggs of Ants, Castor, Pulp of *Coloquintida*, Marjoram, Savin, Wormwood and Rue, of each one handful; the Seeds of Cumin, Aniseeds, Fennel-seeds, and Caraway-seeds, of each three drams; Bay-berries and Juniper-berries, of each half an ounce; the Rinds of Pomgranats, six drams; Roots of black Hellebor, of round rooted *Cyperus*, of Radishes and Sow-bread, of each one ounce; bitter Almonds, two drams; with seven pretty large Onions: Infuse them in a sufficient quantity of Wine, and draw it off from a *Balneum Mariæ*. Use as above. Sometimes you may add a small quantity of Opium.

If

If the Pain be occasion'd by Worms, they ought to be entic'd to come forth by pouring in sweet Milk, or applying a sweet Apple rosted to the Ear. If they refuse to come forth, they must be kill'd by bitter Oils and Juices. As,

Take of the express'd Oil of Peach-seeds, one dram; *Quercetanus*'s Oil of *Coloquintida*, half a dram; sweet Mercury, from six grains to half a scruple: Mix and pour it in by drops, or apply it with Cotton. Or,

Take of Aloes, two drams; Myrrh, from a dram to two drams; *Coloquintida*, half a dram; tops of Wormwood, half a handful. Boil them in a sufficient quantity of Wine or Water, and use the strain'd Liquor as above.

Fumigations by the bitter Herbs and antimonial Ingredients, are proper both for the Ear and Mouth.

If a Fly creep into the Ear, put a little Turpentin into it: If a Flea, put a little Ball of Dogs-hair: If a Leech, inject the Solution of common Salt, or the warm Blood of any Animal.

ART. VI.

Of Headachs.

SOmetimes the whole Head is seiz'd with an universal Pain; at other times only a particular part, as the hinder part of the Head in Women, which generally flows from the Disorders of the Womb; the external Membranes surrounding the Skull, in venereal Cases; and the internal Membrane call'd *Dura Mater*, from the Indisposition of the Blood, which it receives by an infinit number of capillary Veins.

If the Headach be not originally caus'd by some Disorder in the Head, it often-times proceeds from those of the Stomac, the Spleen, the Kidneys, the Womb, *&c.* by reason of the mutual Commerce establish'd betwixt them and the Head, by virtue of their Membranes and Nerves.

If it proceed immediarly from some defailance in the Head, it may be caus'd accidentally by external Wounds, use of Mercury, immoderat Drinking, *&c.* and disappears upon their removal. If it become habitual and inveterat, it proceeds either from an Inflammation of the Blood in the Vessels of the Brain, or the Depravation of the *Lympha* separated by its Glandules, or a Collection of some heterogeneous Humor which often-times settles into a viscid Consistency, and creates particular Pains confin'd to narrow Bounds, as the breadth of an Egg, the head of a Nail, *&c.*

The

The only use of Signs in this Case is to distinguish the Causes: If 'tis inconstant, and apt to relent, or be accompany'd by Disorders in the lower Region of the Body, without any visible defect in the Head, it is owing to the influence of these other affected Parts. If it be habitual, or observe set Periods in returning, and be influenc'd by the Sun and Moon, 'tis an essential Headach. And if it cause a Sense of beating, like to that of an Artery, and a burning Heat, it proceeds from the Blood. If it increase after eating, or vanish after Sleep, it arises from the Depravation of the Chyle. If attended by a Drousiness, a Sense of Weight, and a seeming Distention of the Brain, it proceeds from some serous or viscid Matter lodg'd in the Head. If follow'd by scorbutic or venereal Symptoms, they discover the Cause.

As for Prognostics. If in Fevers it suddenly vanish without any Evacuation, 'tis an ill *Omen*. If attended by grievous Symptoms, as Giddiness, Convulsions, Vomiting, *&c.* 'tis not easily cur'd. If a drouzy Headach seize a Childbearing Woman, it is dangerous. If accompany'd by a Coldness of the external Parts, it betokens an inward Inflammation. 'Tis more suspected in acute than in chronical Diseases.

In order to a regular Cure, 'tis needful to observe the following Cautions. 1. If it arise by consent with other Parts, it yields to Vomiting, Purging, and the Restoration of the disorder'd Part. But if it be essential and inveterat, frequent Evacuations are not so proper as corroborating cephalic Medicines.

2. Opiats are not very proper in essential Headaches. At least they must be given in small Doses; and if externally us'd, must not be applied to the Sutures, but to the Temples and Forehead.

3. 'Tis always conducive, excepting the case of a malignant Fever, to keep the Belly open.

4. The scorbutic Pains of the Head are the most obstinat. The Decoctions of sudorific Woods, volatil Salts and Spirits, Milk, Opiats, blistering Plaisters, and external anodyn Applications, are proper in such cases.

5. In all Headachs the Decoctions of the sudorific Woods ought to succeed to the general Evacuations.

6. Chirurgical Operations are of great use. If it proceed from the Blood, open a Vein in the Arm, or the Vein of the Forehead, or the Vein betwixt the Thumb and first Finger;

ger; or apply Leeches to the Temples; or open the Artery that runs along the temporal Muſcle towards the Forehead, which gives preſent Relief, and is a very innocent Operation, if cautiouſly perform'd. If it ariſe from a Depravation of the Serum, apply bliſtering Plaiſters behind the Ears, or over the whole Head; or cut Iſſues in the Arm, Neck, or Head it ſelf. Trepanations are ſometimes, but very ſeldom, convenient. Cupping-Glaſſes are not amiſs. But the univerſal Evacuations ought to precede all chirurgical Attempts.

7. If the Headach ariſes by Conſent, Vomits are proper. But if it be eſſential, Purges are more convenient. As,

Take of the Pills of Maſtic, a ſcruple; Extract of black Hellebor, Extract of Caſtor, of each five Grains; Troches Alhandal, two grains: With a ſufficient quantity of *Elixir Proprietatis*, make Pills. They are likewiſe proper againſt the Diſorders of the Stomac and lower Belly, which often-times cauſe a Headach.

Take of *Crollius* his *Extractum Panchymagogum*, or Extract of black Hellebor, fifteen grains; Extract of Vervain, ſeven grains; ſweet Mercury, from half a ſcruple to fifteen grains; *Laudanum Opiatum*, two drams; Scammony ſulphurated, two or three grains: With a ſufficient quantity of the Eſſence of Saffron, make Pills.

In a pituitous Headach, take of the Conſerve of Roſemary-flowers, one dram; Cream of Tartar, half a ſcruple; golden Sulphur of Antimony, five grains; Roſin of Jalap, four grains. Make a Bolus.

8. Roſemary always ought to be added to the ſudorific Decoctions. The volatil Salt of Amber, Camphyr, the diaphoretic Preparations of Antimony, and urinous volatil Salts, are proper Alteratives in all Pains of the Head. The Decoction of Tea in Wine or Water, the Eſſence of Silver, the volatil Spirit of Vitriol, *&c.* are of the like nature.

Take of prepar'd Amber, from half a ſcruple to fifteen grains; Cinnabar of Antimony, half a ſcruple; *Laudanum Opiatum*, one grain; diſtill'd Oil of Saſſafras, one drop. Mix for a Pouder. Or,

Take of native Cinnabar or Cinnabar of Antimony, a ſcruple; Extract of the Wood Aloe, fourteen grains; Extract of Caſtor, eight or ten grains; *Laudanum Opiatum*, four or five grains. Make Pills for four Doſes. Or,

Take of black Cherry-water, Vervain-water, of each one ounce; Water of Lilly Convally prepar'd with Wine, ſix drams;

drams; the Spirit of Harts-horn with Amber, two ſcruples; Syrup of Betony, three or four drams. Or,

Take of the Spirit and volatil Salt of Harts-horn, three drams; Eſſence of Opium tartariz'd, one dram: Mix. Doſe forty or fifty drops. Or,

Take of the compound Eſſence of Caſtor, two drams; Eſſence of Amber and Spirit of Harts-horn with Amber, of each a dram: Mix. 'Tis profitable in a catarrhous Head-ach.

9. Among the external Medicines *Vervain* leads the Van. Next are the Flowers of red Poppies, and the Herb Betony. As,

Take of Betony, two handfuls; Wormwood, one handful; Cubebs, two drams: Boil them in two Pints of Wine, and foment the Head with the Decoction.

The Root of *Rhodium* may be beat up with Vervain-water, and applied to the Head in the form of a Cataplaſm. Or,

Take of the Root of *Rhodium*, an ounce and a half; Flowers of red Poppies and of Roſes, of each half a handful, with three Poppy-heads: Boil them in Water, and apply the ſtrain'd Liquor warm to the Forehead and Temples.

Timæus fomented the Head with the following Mixture:

Take of Vervain-water, an ounce; Betony-water, Elder-water, of each half an ounce; Pouder of Rhodium-roots, two drams; Roſe-vinegar, ſix drams: Mix, *&c.*

Emulſions made from narcotic Seeds and cephalic Waters, or Decoctions of cephalic Herbs, are ſometimes us'd both inwardly and outwardly. The following Infuſion is mightily eſteem'd.

Take of the Seeds of Henbane, one ounce; Roſe-vinegar, five ounces; put 'em into a Viol well ſtopp'd, and let them digeſt in a *Balneum Mariæ* for five or ſix hours. Apply it to the Head with a Spunge.

The Ointment of Alabaſter is us'd in all Pains of the Head. Or,

Take of expreſs'd Oil of Poppy-ſeeds, a dram; expreſs'd Oil of Peach-ſeeds, two drams; expreſs'd Oil of Henbane, and diſtill'd Oil of Dill, of each a ſcruple: With a ſufficient quantity of Wax make a Liniment to be applied to the Temples.

Take of the Extract or thicken'd Juice of Vervain, a dram; expreſs'd Oil of Henbane, half a ſcruple: Make a Liniment. 'Tis excellent in ſcorbutic Caſes.

In chronical Aches external Narcotics are of no great uſe. They may be fitly exchang'd for a Plaiſter of Tacamahac, with diſtill'd Oil of Amber.

10. If the Headach be caus'd by the Effervescency of the Blood, a Clyſter ought to be injected before Blood-letting. Abſorbent diaphoretic Pouders and gentle acid Juleps are proper: Outwardly we apply the Juice of Houſeleek and Purſlain warm to the Forehead, Temples and Stones; likewiſe Emulſions, and Ointments. As,

Take of Ointment of Alabaſter, three drams; Treacle of *Andromachus* or *Philonium Romanum*, half a dram; expreſs'd Oil of Nutmegs, half a ſcruple. Make a Liniment. Or,

Take of the freſh Juice of River-crabs, three ounces; Betony-water, Water of Chamomile-flowers, and Water of Elder-flowers, of each one ounce; Pouder of Zedoary, two or three drams. Make an *Epithema*. Or,

Take of the Herb Vervain, of Violets, of each a handful: Of the Flowers of Roſes, of Elder, and of Violets, of each half a handful. Tie them into a Bag, and boil it in ſharp Wine.

If a Plaiſter be more acceptable, Take of the Plaiſter *de Ranis* with Mercury, a convenient quantity; of the Plaiſter of Betony, and of Alabaſter, of each half as much. Make a Plaiſter.

If there be any apprehenſions of Phrenſies or Convulſions: Take of the Leaves of Rue, a handful and a half; Pigeons-dung, an ounce; common Salt, half an ounce; Capital Lees, two ounces. With Elder-flower-vinegar, make a Cataplaſm to be applied to the Feet.

11. If a Headach be caus'd by a redundancy or ſharpneſs of the Serum, and the Perſon be of a plethoric Conſtitution, firſt of all let Blood. If Bleeding be inconvenient, inject a Clyſter, or exhibit a Laxative; then apply bliſtering Plaiſters to the Neck, or behind the Ears; and in inveterat Pains, to the Head. In the interim Opiats may be cautiouſly exhibited; and when the Pain relents, Purging, Sweating and diuretic Medicines may take their turns. In order to provoke Sweating and Urine, take what follows:

Take of the Roots of Elecampane, of Avens, and Sarſaparilla, of each ſix drams; Roots of Florentin-Orris, and Shavings of Saſſafras, of each half an ounce; of the Herbs Roſemary, Sage, and Chervil, of each half a handful; Galangal, two drams; Fennel-ſeeds, three drams. Boil them in a ſufficient quantity of Water, and add two ounces of Syrup

rup of Betony or of red Poppies, to a pint and a half of the ſtrain'd Liquor. Doſe, two or three ounces, twice or thrice a Day.

12. If the Pain be fix'd and obſtinat, it ariſes from a viſcid tenacious Matter, which ought to be remov'd by the ſweating Decoctions above mention'd; and applying of Balſams or diſtill'd Oil of Amber, and the Plaiſter *de Ranis* with Mercury, to the Head. When the Sutures of the Head open, this Plaiſter is of excellent uſe, in which caſe ſharp Clyſters are alſo proper. As,

Take of the Electuary of Hiera with Agaric, four ounces; Electuary of Bay-berries, two ounces; Pouder of black Hellebor-roots, an ounce and a half; the Gall of a Bull thicken'd, three drams. Mix, and add two ounces to the common Decoction for Clyſters.

For a change; inſtead of the Plaiſter, the Head may be fomented with the Decoction of Roſemary, Vervain, Betony and Chamomile-flowers in Wine.

13. If the Pain proceed from Cold, diſcuſſing Medicines are requir'd. As,

Take of Millet-ſeeds toſted, a handful; common Salt dry'd over a Fire, half a handful; Vervain (or Betony, or Elder-flowers) and Chamomile-flowers, of each half a handful; Pouder of *Rhodium*-Roots, half an ounce. Sow them into a quilted Bag: 'Tis very proper for old Men, as likewiſe bliſtering Plaiſters.

14. If the Headach be caus'd by external Accidents, apply the following Plaiſter.

Take of the Gum Hederæ, (or Elemi) three ounces; Roſin, half an ounce; Wax and Turpentin, of each three ounces; Oil of Roſes, two ounces and a half; the Gum *Animæ* diſſolv'd in Vinegar, two ounces; Juice of the Flowers of Ivy, four ounces; Meal of Beans as much as ſufficeth to make a Plaiſter.

The Ointment of Alabaſter, or *Hartman*'s Bag of Amber with the Eſſence of Pepper; or a Plaiſter of Tacamahac with Oil of Amber, are very uſeful on this occaſion.

15. If the Pains of the Head are caus'd by Worms, Take of the Pouder of Aloe and of Earthworms, of each two drams; the Gall of a Bull, a dram; Oil of Wormwod and Wax, of each a ſufficient quantity for a Plaiſter, to be applied to the Head. Then make a Fumigation of the following Pouder, to be receiv'd by Mouth and Noſe.

Take of the Powders of leſſer Centory, Horehound and Betony, of each two drams; Zedoary, half a dram; Roots of Angelica, two drams; Amber, a dram; Crude Antimony, an ounce; Millet-ſeeds, (or Ginger) a dram and a half; Bole-armenic, a dram; Roots of round Birthwort, two drams; Wormwood, two or three drams: Make a Powder for a Fumigation.

A ſneezing Medicine, compos'd of Pepper and Caſtor; and the Fumes of Spirit of Wine, Myrrh, and Seeds of Fennel-flower, convey'd into the Ear, are convenient in this Caſe.

16. If the Pains proceed from immoderat Drinking, Vomits and Purges are firſt requir'd: Then Pepper, cephalic Spirit of Vitriol, and *Elixir Proprietatis*. Cold Water with Vinegar may be thrown upon the Head and Stones.

17. When one half of the Head only is affected, 'tis call'd a *Hemicrania*, and is the higheſt degree of Headachs. A Cataplaſm of the Root of a wild Cucumber, or Briony, with Vervain and Wormwood, or a Decoction of them, may be applied to the Part affected. Or,

Take of Euphorbium, one ounce; ſweet Oil, a pound; let them boil together; then add three ounces of Wax, and make an Ointment, to be applied to the Temples, Forehead, *&c.*

18. If it ariſe from the Womb, apply a Bag of Amber and Eſſence of Pepper, or a Plaiſter of Tacamahac and Oil of Amber.

In all theſe particular Caſes the general Evacuations muſt be firſt taken care of, and no external Medicines are ſufficient for the Cure without the Aſſiſtance of Internals.

ART. VII.

Of arthritic Pains.

THe Parts immediatly affected are the membranous Ligaments ſurrounding the Joints. The Cauſe is a volatil Acid join'd to the Spirits, which gnaws the Membrans, and thickens their nutritious Juice. This Acid takes its firſt riſe from the Diſorders of the Stomac. It diſplays it ſelf in the Foot, and is call'd the Gout; in the Huckle-bones, and is call'd the Sciatica; in the Hands, and ſeveral other Parts of the Body. Sometimes 'tis hereditary. In other Caſes 'tis acquir'd by the uſe of acid Wine, Venery and Paſſion, or any

any Commotion of the Spirits that increaſes the Acid in the Body.

The Acid affects chiefly the ſolid Parts, and ſerves to depurat the Blood and fluid Humors. When it invades a ſolid Part, it leaves ſome ſmall Particles in it that afterwards revive, and make a new Paroxyſm.

The Paroxyſm is uſhered in by a Conſtipation of the Belly, difficulty of Breathing, and unſufferable Hear at the Stomac, Thirſt and loſs of Appetite. In the Gout the great Toe is firſt affected; in the Sciatica the Huckle-bone, where it receives the Bone of the Thigh, and all the Membrans from thence downward to the Foot are contracted. If the Acid be ſharp and fiery, theſe Symptoms are aggravated; if it be viſcid, and what we call cold, the Symptoms are weaker, and the Fits of a longer Duration.

In forming Prognoſtics, we may expect the Paroxyſm when the wonted Excrements betwixt the Toes diſappear, and the Belly is conſtipated. The Sciatica is more obſtinat than the Gout; which if inveterat, hereditary, or attended by Nodes, is incurable in old Men. If the Joints adjacent to the Original of the Nerves be ſeiz'd, it portends Death. If any part be put out of Joint by arthritic Pains, 'tis a hard matter to ſet it right. The frequency of bad Symptoms, and the moving of the Pains towards the Throat and upper Parts betokens Death. If the Paroxyſm do not finiſh its Courſe, but break off abruptly, 'tis an ill Omen.

As for the Cure. When we foreſee a Paroxyſm, 'tis convenient firſt to exhibit the Pouder of Crabs-eyes with Salt of Tartar and *Oſteocolla*; then a Vomit, and afterwards the following Purge:

Take of Cream of Tartar, Salt of Wormwood, *Arcanum duplicatum*, of each eight grains; *Diagrydium*, three grains: Make a Pouder. Or,

Take of the Conſerve of Roſemary, Conſerve of Sage, of each ſix drams; *Paracelſus* his purging Pouder for the Gout, a dram and a half; Roſin of Jalap, half a ſcruple: With Syrup of Buckthorn, make an Electuary.

All purging Medicines ought to be avoided during the increaſe of the Fit; but after it has paſs'd the height, and the Fever and other Symptoms have diſappear'd, they are very proper.

Take of *Ruffus* his Pills *de tribus*, Extract of black Hellebor, of each half a ſcruple; Turbith Mineral prepar'd with Spirit of Sulphur, two or three grains: Make purging Pills.

Opiats ought never to be us'd, but after the univerſal Evacuations, and along with purging and ſweating Specifics. As,

Take of the Pills *Aloephanginæ*, two drams; *Laudanum Opiatum*, half a dram: Make Pills for four Doſes, to be taken in Wine, faſting three or four Hours after.

Take of prepar'd Crabs-eyes, *Mynſichtus* his *Arcanum Duplicatum*, of each twelve grains; Salt of Amber, ſix grains; Hyſteric Landanum, three grains: Make a Pouder. Or,

Take of Triacle, from half a dram to a dram; Salt of Wormwood, a ſcruple: With Wine make a Draught. Or,

Take of Fennel-water, Water of *Cardnus Benedictus*, of each an ounce and a half; Spirit of putrified Earthworms, a dram and a half; Sal-armoniac, Magiſtery of Coral prepar'd with Juice of Citrons, of each half a dram; *Laudanum Opiatum*, two grains; Syrup of Orange-peel, half an ounce: Mix.

In arthritic Pains Blood-letting is pernicious. But in the Sciatica, 'tis needful in the beginning of the Paroxyſm, to open a Vein in the Foot of the ſame Side with the affected Part. Clyſters ought to be injected, during the whole Courſe of the Paroxyſm.

The Specifics that are proper in the Paroxyſm are ſweating Medicines, both fix'd and volatil, as red Coral, Cinnabar of Antimony, volatil Salt of Harts-horn or of Vipers; Spirit of Sal-armoniac, volatil Spirit of Tartar, and the Decoction of ſudorific Woods: Antiſcorbuticks ought to be mix'd with 'em.

External Medicines ought not to be applied till the Paroxyſm arrives at its height. In a hot Gout, attended by Inflammations, take Quick-lime and Sal-armoniac; pour Spirit of Wine upon 'em, and diſtil, adding to the diſtill'd Spirit a little Camphyr. Apply it to the Part. Or,

Take of *Aqua Articularis ad extra*, two ounces; Spirit of Worms, an ounce, Spirit of Sal-armoniac, three drams; Mix and uſe as above. Or,

Take a ſufficient quantity of Elder-flowers beaten, put 'em into a new earthen Veſſel, ſo that the Veſſel may be full: Stop it cloſe, and ſet it under Ground till the Flowers be converted into a Liquor: to be applied hot with a Cloth.

Mullen-flowers and Henbane-flowers, may be boil'd in Milk; or the Leaves of Valerian or Burdock may be applied to the Part with good Succeſs. Or,

Take

Take of the Crums of white Bread, three ounces; Powder of Marshmallow-roots, one ounce; Flowers of Chamomile, Meal of Beans, half an ounce; Meal of Linseeds and Fenugrec, of each three drams. Boil them in a sufficient quantity of Milk, to the Consistency of a Pultise: then add of *Unguen-guentum Anodynum*, an ounce; Balsam of Soap, two drams: With the Yelk of one Egg, make a Cataplasm.

The Lean of Beef applied to the Part, and chang'd Morning and Evening, is much commended. Human Dung and Urine are likewise proper. Or,

Take of Ox-dung, one pound; Rose-water, and Water of Speedwel, of each two ounces; the Yelk of an Egg beaten up with a little Allum; Saffron, a dram; Camphyr, a scruple. Mix.

The Plaister of Frogs-spawn with a large quantity of Sugar of Lead, or *Tachenius*'s Plaister *de Alcalibus*, with Camphyr, are proper. All oily things ought to be avoided, and the Cataplasms or Plaisters frequently renew'd.

If the Gout be cold, Spirit of Sal-armoniac prepar'd with Quicklime and Spirit of Urine may be applied. Or,

Take of *Venice*-Soap, an ounce and a half; Camphyr, six drams; Castor, half a dram. Dissolve in a sufficient quantity of Spirit of Earth-worms. Apply with a Feather to the Parts affected.

The Oil of Soap, or the Roots of black Hellebor boil'd in Rock-oil; or Balsam of *Peru* mix'd with the Yelk of an Egg and Spirit of Worms; or Tacamahac, mix'd with Oil of Amber; or *Mysinchus* his diaphoretic Plaister, mix'd with Triacle and stinking Oil of Tartar; or Triacle mix'd with Spirit of Sal-armoniac, are all much esteem'd in this case.

Blistering Plaisters ought to be cautiously us'd. In a cold Gout perhaps they are not amiss.

If the Pains are follow'd by Nodes or hard Swellings, apply to the Part Spirit of Quicklime or old Cheese with the Decoction of Pork, or a thin Plate of Lead.

The Cure of the Sciatica differs in some things from that of other arthritic Pains. In this Leeches applied to the hemorrhoid Veins are very useful: after which inject sharp Clysters, as,

Take one Coloquintida-apple, and divide it into four equal parts. Tie one part in a Bag, and boil it in Wine and Child's Urine, of each a pint, adding a handful of Honey-suckles, till two thirds be consumed. Inject it for a Clyster.

Vomits and ſtrong Purges are more allowable in the beginning of a Sciatica, than of the other ſorts. And in the progreſs of the Diſeaſe, Troches Alhandal, and ſweet Mercury, are ſafely given. As for external Remedies, the following Cerecloth is equall'd by none.

Take of Pitch, four ounces; Turpentine, half an ounce; Maſtic, Amber, of each two drams; Brimſtone in Pouder, half an ounce: Make a Cerecloth.

I cured the Sciatica in a young Gentleman by this Method. He being plethoric, I firſt ordered a Vein to be opened; then I preſcribed thus:

Take of diaphoretic Antimony, chalybeat Bezoar, of each half a ſcruple; diaphoretic Gold, five grains: Make a Pouder to be frequently repeated.

Take of the Waters of Mother of Thyme, of Mint and Elder-flowers, of each one ounce; Spirit of Sal-armoniac, a dram and a half; prepar'd human Bones, two ſcruples; diaphoretic Antimony, a ſcruple; Laudanum Opiatum, three grains; Syrup of *Carduus Benedictus*, ſix drams. Mix, and give it by ſpoonfuls.

Take of the Spirit of Sal-armoniac, Liquor of Harts-horn ſuccinated, of each a dram and a half: Mix and reſerve for uſe.

Externally I applied the above-mention'd Cerecloth for ſome Days; then I order'd the Part to be rubb'd and fomented with the following Mixture.

Take of *Aqua Articularis ad extra*, an ounce and a half; Spirit of Sal-armoniac prepar'd with Quicklime, ſix drams. Mix, *&c.*

Cataplaſms of antiſcorbutic Herbs boil'd in Wine, and bathing in Wine, or in the Decoction of Ants in Wine, are much commended.

If after the Paroxyſm there remain a Swelling, 'tis proper to fumigate the Part with Wormwood, Rocket and Mugwort, boil'd in Wine and Water, or to apply the *Nuremberg* Plaiſter. The Decoctions of aromatic Vegetables in Wine are good for ſtrengthning the Joints. If there remain a Weakneſs in the Joints, without any Swelling, let Iſſues be cut in ſeveral Parts of the Body: And indeed an Iſſue in the Groin is not improper.

Thus much for what is proper to be done in the Paroxyſms. It remains now briefly to point out the Method of preventing them. The vicious Acid muſt be carefully rooted out of the Stomac, by the uſe of Mercurial and Antimonial Preparations,

tions, and a regular Diet. Those who are meagre, and can easily digest Milk, may confine themselves to a Milk-diet.

Vomits are absolutely necessary. Turbith Mineral, sweet Mercury, black Hellebor and Coloquintida, are much used. Gentle Purges, and such as regard the Stomac, are best. Sweat ought to be frequently procur'd by the use of diaphoretic Antimony, *Antichecticum Poterii*, antimonial Sulphurs, and urinous Sudorifics. Next are Diuretics, which are of excellent use in preventing the Gout: Such are the Spirits of Salarmoniac, Worms, Harts-horn, *&c.* or the greazy Stag-flies. Or,

Take of prepar'd Crabs-eyes, two scruples; prepar'd red Coral, a scruple; volatil Salt of Amber, fifteen grains: Mix for three Doses.

Among Alteratives, aromatic volatil Medicines are proper. As,

Take of the Roots of Elecampane, Pyony and Avens, of each six drams; China-roots, one ounce; of the Herbs, Sage, Baum, Germander, Ground-pine, of each a handful; Rosemary-tops, two handfuls; Juniper-berries, an ounce and a half; Galangal, Ginger, Cinnamon, of each two drams; Salt of Tartar, from three to four drams. Tie them in a Bag to be infus'd in Wine. Or,

Take of the Herbs Germander and Strawberry, of each a handful and a half; Rest-harrow, Flowers of St. *John*'s Wort, of each a handful; Bryony-roots, an ounce and a half; Sarsaparilla, an ounce; Nephritic Wood, three ounces; fresh Juniper-berries, half a pound; aromatic *Costus*, three drams: Tie them in a Bag to be put into fermenting Ale.

A Salivation may be attempted before the Disease be confirmed; but afterwards 'tis dangerous.

'Tis usual also to make Washes for the Feet. As, Take of Juniper-berries, half a pound; of the Herb Rosemary, six handfuls; Mother of Thyme, and Marjoram or Sage, of each two handfuls. Boil them in Lees; and bathe the Feet at Night going to Bed.

CHAP. IV.

Of the Disorders of the Sense of Tasting.

THE Nerves of the Tongue terminat in a great many Glandules, dispers'd along its Surface; which are endow'd with such a peculiar Texture, as to be sensible of the various Impressions of the minutest saline Particles, according to their

their reſpective Circumſtances; in which conſiſts the Senſe of Taſte.

This Senſe is extinguiſh'd or render'd dull by the miſplacing of the Nerves of the Tongue, the relaxation of its Fibres, ſharp Defluxions, or paralytic and apoplectic Diſeaſes. 'Tis ſometimes vitiated, and counterfeits falſe Taſtes, by virtue of the Depravation of the Spittle; as in ſcorbutic, hypochondriac, and catarrhous Caſes, or thoſe of a Jaundice or internal Ulcers. This Depravation is cur'd by taking a Vomit, drinking Whey with Juice of Citrons or mineral Spirits, and removing the principal Cauſe. In caſe of an Abolition or Flatneſs, aromatic and cephalic Medicines are proper. Horſe-radiſh-roots chew'd in the Mouth, or the Juice of Sorrel and Purſlain, us'd by way of Gargal, are of noted virtue for reſtoring the Taſte.

If the Muſcles of the Wind-pipe, or the recurrent Nerves are ſeiz'd with a Palſie or Convulſions, there inſues an *Aphonia* or want of Voice, which, if attended by a Hick-cough, is very dangerous.

In the Method of curing an *Aphonia*, the remote Cauſes which occaſion the relaxation or contraction of the Muſcles or Nerves muſt be taken care of. Internally give the Spirit of Sal-armoniac, or of Harts-horn with Caſtor or Amber. In an inveterat Palſie the Decoction of ſudorific Woods is very proper. Sometimes 'tis convenient to procure a Salivation by chewing Medicines.

For external uſe, apply to the Neck a Bag of aromatic Ingredients ſprinkl'd with Spirit of Wine; or bathe it with the Eſſence of Caſtor, Spirit of Worms or of Ants, or the diſtill'd Oils of Amber, Lavender, Rue, Juniper, mix'd with Triacle, or Balſam of *Peru*. After a Fit of an Apoplexy give what follows:

Take of the Herbs Sage, and Roſemary, of each a handful; Rocket-ſeeds, two drams: Boil them in a ſufficient quantity of ſimple Water in a cloſe Veſſel. To a pint of the ſtrain'd Liquor add Spirit of Black Cherries, ſix drams; Spirit of Sal-armoniac, a dram; Hony of Roſemary-flowers, one ounce: Mix for a Gargal. 'Tis proper to open a Vein under the Tongue, if the Circumſtances of the Patient admit of it.

Sometimes the Muſcles of the Wind-pipe are in good order, and the Voice remains, but cannot be form'd into an articulat Sound or Speech, by reaſon of the paralytic or apoplectic Diſorders of the Tongue. In this Caſe

Take

Take of the Herbs, Rosemary, Marjoram, Sage, of each a handful; Roots of Pellitory of *Spain*, half an ounce; Rocket-seeds or Mustard-seeds, two or three drams; Cloves a dram; boil them in a close Vessel in Water. To a pint of the strain'd Liquor, add Spirit of Juniper-berries, or of Black Cherries, from six drams to an ounce and a half; Spirit of Sal-armoniac prepar'd with Quicklime, or with Cloves, from a dram to a dram and a half; Honey of Rosemary-flowers, from six drams to an ounce: Make a Gargal. Or,

Take of Sage, Hyssop, Acorus, of each a handful; boil them in Water. Strain the Liquor, and add an ounce of Oxymel of Squills. Mix for a Gargal.

Take of Rocket-seeds, Squills, Onions, Smallage, of each half a dram; Ginger, Pepper, Cinnamon, and Nutmegs, of each a dram; of the Pouders *Diambra*, *Diamoschum dulcis*, and *Diambos*, of each two scruples. With a sufficient quantity of *Aqua Vitæ* make a Mixture, and anoint the Tongue and Palat.

The Essence of Castor, or Castor it self applied to the Bridle of the Tongue, is very useful, especially for the stuttering of Children. The distill'd Oils of Cloves, Aniseeds, or Amber; the cephalic Spirit of Vitriol, or Spirit of Black Cherries, or Spirit of Triacle with Camphyr, *&c.* are all very proper. As,

Take of Mithridat, three drams; Extract of Castor, half a dram; distill'd Oils of Lavender, Amber and Aniseeds, of each four drops: Mix, and rub the Tongue.

Take of Mithridat three ounces, candy'd Roots of Acorus an ounce; Ginger, Nutmegs, of each two drams; volatil Salt of Amber, a dram. Mix all together in a Mortar, and add of the Juice of Sage clarify'd an ounce, and scumm'd Hony as much as sufficeth to make an Electuary, which sprinkle with distill'd Oil of Aniseeds or Amber; rub the Tongue frequently with it, and lay about the bigness of a Nutmeg upon it, to be swallow'd down by degrees.

If old People are seiz'd with a difficulty of Speech, exhibit every Morning and Evening an ounce of the Essence of Lavender-flowers infus'd in Spirit of Wine.

A Cataplasm of Lees with Amber or Oil of Amber, and other cephalic Ingredients, may be applied to the Crown of the Head with good success.

CHAP.

CHAP. V.

Of the Diſorders of the Senſe of Smelling.

THe Organ of Smelling is the Membrane plac'd near t the *Sieve-like* Bone above the Noſtrils; which is variouſl affected by the different Textures of the ſulphurous Particle that proceed from external Objects.

This Senſe is aboliſh'd or impair'd by the apoplectic, pa ralytic, and convulſive Diſorders of the Spirits, by the ob ſtruction of the Paſſages, or compreſſion of the nervous Fila ments that reach to the Noſtrils; and by the relaxation o the Membrane; which may be occaſion'd internally by copi ous Defluxions, and externally by the forcible Impreſſions o odoriferous or ſneezing Things. If it proceed from this laſt Cauſe, 'tis almoſt incurable.

As for the Cure. The Diſorders of the Spirits ought to be redreſs'd, the Defluxions prevented, and external offending Objects remov'd betimes. The Medicines that are proper for theſe different Purpoſes are recounted elſewhere.

Marjoram and Fennel-flowers are two noted Specifics in this Caſe. The Extract or Eſſence of Marjoram mix'd with the Oils or Eſſences of Penny-royal and Roſemary, may be taken inwardly from eight grains to half a ſcruple.

Take of the Oils of Fennel-flower, and of Orris, of each half a dram; diſtill'd Oil of Marjoram, half a ſcruple. Apply it to the inner ſide of the Noſtrils; 'tis admirable in the Caſe of an Obſtruction or Catarrh. Or,

Take of Marjoram and Fennel-flower-ſeeds, each two drams: ſprinkle 'em with ſome drops of diſtill'd Oil of Marjoram or of Aniſeeds; and, according to Art, make a little Bag for the Noſtrils.

Take of Fennel-flower-ſeeds infus'd in ſtrong Vinegar, and afterwards dried, Rue, Fumitory and Caſtor, of each a dram; reduce them to fine Pouder, and with Child's Urine beat it up into the form of a Syrup. Let the Patient ſnuff up five or ſix drops in the Morning faſting, leaning his Head backwards, and holding warm Water in his Mouth.

The Obſtruction of the Noſtrils may be caus'd by a *Polypus*, or fleſhy Excreſcency, that fills up the ſpace. Sometimes it riſes from the glandulous Membrane at the top of the Noſtrils, but more frequently from the nervous Filaments in the Sieve-like Bone. Sometimes it deſcends to the inſide of the Mouth.

Some-

Sometimes it has but one Stalk, at other times more. Its Colour is white or red; if it be livid and painful, 'tis near kin to a Cancer.

It proceeds from the Corruption and Redundancy of the nutritious Juice, and the occasional Breach of the Unity of the Part. If it be white, soft, and painless, it is a good sign. If 'tis deep rooted, and reaches to the nervous Filaments, 'tis dangerous.

The Cure is chiefly perform'd by external Applications: If the Body be disorder'd, 'tis not improper to prepare it by internal evacuating and altering Medicines. The external Remedies must be us'd in the last Quarter of the Moon, because the Swelling then decreases. The milder sort are the Juice of Pomgranats, Mustard-seeds mix'd with Vinegar, the Juice of *Onopostus*, (a sort of Thistle) the Pouder of Turnsole, the Juice of Water-cresses, or the Juice of the Roots of Aron; all which may be applied with Cotton to the Part affected. The fiercer Remedies are sublimate Mercury, Verdigreese and Lees; the acid mineral Spirits, *Aqua fortis*, &c. As,

Take of the Juice of Pomegranats, three parts; Oil of Vitriol, one part; mix. Or take of the Oil of Vitriol, a scruple; burnt Alum, a dram; Plantain-water, an ounce; mix, and sprinkle the Polypus with it every day. Or,

Take of the Cerecloth of Myrtles, an ounce; of the Ointment call'd *Ægyptiacum*, two drams; mix for a Liniment: you may sharpen it with precipitat Mercury frequently wash'd.

In applying these Caustics, care must be taken that they touch not the neighbouring Parts, by using a Silver Fistula, or Cotton, or a Tent.

If a Polypus have any tendency to a Cancer, it ought not to be meddled with. If it be ulcerated, apply the Water or Ashes of Frogs, Pouder of Crabs, Lead melted and dulcify'd, the *Crocus* of Steel, and such like.

If it only hang by one Stalk, it may be cut off, or a Thread of Silk well wax'd ty'd about the root. After 'tis taken off, the bleeding must be stopp'd by Astringents, and the Pouder of Gentian with the Juice of Figwort applied on a Tent to the Nostrils, in order to prevent its return.

The Smell may be adulterated by an Ulcer in the Nostrils call'd *Ozæna*, which sometimes seizes only the membranous soft Parts, at other times the Cartilages and Bones. It may occasion bleeding at the Nose, or a plentiful Evacuation of of a sordid Matter, or a Corruption of the adjacent Parts, or a *Polypus*.

The

The external Cauſes of an *Ozæna* are various; the internal for the moſt part is the Pox. It ought to be cautiouſly handled for fear of a Cancer: If it be inveterat, and affect the Sieve-like Bone, 'tis not eaſily cur'd.

The Ulcer may be cleans'd by ſnuffing up the Decoction of leſſer Centory, and aromatic *Calamus* in Wine, till the Patient be ſenſible of its falling into the Palat; or Marjoram-water with Hony, Myrrh, Sugar-candy, and a little Cinamon.

Take of the Ointment of Tobacco, three drams; Balſam of Sulphur for external uſe, a dram: mix, and apply to the Ulcer. The freſh Leaves of Tobacco may be put into the Noſe, and kept there ſome Months, then taken out and anointed with this Balſam.

If there appear a Cruſt upon the Ulcer, it ought not to be remov'd by force; but by applying Oil of ſweet Almonds, or Oil of Roſes with freſh Butter: after which proceed to the cleanſing Remedies; among which Clary boil'd with Hony of Roſes is the moſt noted. The Decoction of Agrimony and Vervain in Hony, or Child's Urine, or the Smoak of a red Wax-candle receiv'd at the Noſtrils, are proper for the ſame purpoſe. Or,

Take of Marjoram and Plantan-water, of each an ounce and a half; rectify'd Spirit of Wine, three drams, Hony of Roſes, ſix drams: mix, and inject with a Syringe. If it do not yield to theſe Medicines, we muſt have recourſe to Mercurial Preparations. As,

Take of Plantan-water, four ounces; in which diſſolve of ſublimat Mercury, twelve grains: ſtrain the Liquor, and apply it to the Ulcer.

Sweet Mercury well dulcify'd, or precipitat Mercury with Ointment of Roſes, or the Ointment *Ægyptiacum*, may be applied with a Tent to the Ulcer; or Oil of Vitriol dropp'd on a little Cotton may be applied twice or thrice, and then follow'd by proper Ointments.

SECT.

SECT. III:

Of the Disorders of the internal Senses and Animal Functions.

THe internal Senses depend upon the various Motion and Agitation of the Spirits in the Brain. The Organs of external Sense communicate the Impressions they receive from Objects to the Original of the Nerves, where a Motion not unlike to their own insues, and is called *Common Sense.* This Motion in the common Sensory is imparted to the Spirits in the *Corpus Callosum*, where *Fancy* resides. The Spirits thus mov'd, roll to and again among the Passages of the *Cerebrum* and *Cerebellum*; and their frequent returns thro' the same Passages are christen'd, *The Memory.*

These Faculties are equally compatible to Men and Brutes, and are distinguish'd from those of the rational Soul by their unacquaintedness with reflex Knowledge. If they are disorder'd, all the Functions and Motions of the Body suffer by it. The natural and involuntary Motions of the nervous Fibres that surround the Stomach and Guts, depend upon the regular Recruits of Spirits convey'd thro' the Nerves from the *Cerebellum*; and those of the Muscles which obey the Command of our Wills, are owing to the due distribution of the Spirits from the *Cerebrum.* This Motion of the Muscles is perform'd by contraction. The Spirits croud into the Cavities of the Fibres, and by extending their width abridge their length, and in the interim the arterial Blood flows copiously into the middle of the musculary Fibres, where it meets with least resistance. Thus the bloated Muscle contracts it self, and exchanges its *Rhomboides* Figure for a Rectangular Form.

CHAP. I.

Of a Swimming in the Head, or a preternatural Commotion of the Spirits in the Brain.

THere are several Degrees observable in this Distemper: Sometimes there is only an apprehension that all things are carry'd round and toss'd up and down; sometimes tis attended by a dimness of the Eye-sight, and a false representation

ſentation of various Colours; and often-times the Sight is loſt, and the Perſon falls down, which is moſtly follow'd by Convulſions and a tingling in the Ears.

The Part affected is the Eye, where the Spirits wheel round, and make ſuch Impreſſions on the *Retina*, as external circular Motions are wont to produce. This proceeds from the irregular and confus'd Incurſions of the Spirits, and their impriſonment in the round Globe of the Eye. The dimneſs and loſs of Sight proceeds from the interruption and deficiency of Spirits; in which caſe their whole Syſtem is diſorder'd, and the other Senſes are brought into trouble.

If a Dizzineſs proceed originally from ſome Diſorder in the Brain, 'tis call'd *eſſential*; but that rarely happens: For the moſt part 'tis a Symptom of other Diſeaſes, eſpecially thoſe of the Stomach: For the leaſt diſturbance of the Orifice of the Stomach does quickly diſorder the Spirits in the Brain. Some ſtudious and hypochondriac Perſons are apt to be ſeiz'd with a Swimming while their Stomach is empty, but by eating ward it off. Vomiting generally attends it: and drinking, eating of windy Meat, and ſulphurous Fumes offenſive to the Stomach, are apt to cauſe it. Old Men whoſe Digeſtion is weak, hyſteric Women, and Perſons troubled with Worms in the Guts, or Diſorders of the Spleen or Kidneys, are obnoxious to it: For the Contraction of the Membranes of thoſe Parts is continu'd to the Brain; which reſembles the aſcending of Vapours, and ſo gives occaſion to the vulgar Miſtake.

Sometimes a Swimming may be caus'd by a redundancy of Blood, or by its vaporous halituous Diſpoſition, as in ſcorbutic and hypochondriac Caſes. If it proceed from an original Diſorder of the Brain, 'tis caus'd by external Accidents, or the acceſſion of heterogeneous Particles, or an immoderat Conſumption of the Spirits.

A ſymptomatical Dizzineſs is diſtinguiſh'd by the concurring Diſorders of other Parts, and the apparent good Order of the Brain. If it be inveterat, it portends an Apoplexy in old Perſons, and Convulſions in thoſe that are young. 'Tis more or leſs fear'd according to the height of its degrees. If it ſeize the hinder part of the Head more than the fore part, 'tis more dangerous.

The Cure of Preſervation takes place after the Paroxyſm, and is perform'd by Vomits and ſtomachic Medicines, when it owes its original to the Stomach. If the Stomach be not faulty, gentle Purges may ſupply the place of Vomits. But fierce

fierce Purgatives ought always to be carefully avoided. Upon the whole, Dizziness and Convulsions require the same Remedies.

In the time of the Fit 'tis necessary to commence the Cure by a Vomit, by reason that for the most part it arises from the Disorders of the Stomach; or at least sharp Clysters must be injected.

Take *Mysichius* his emetic Tartar, two grains; Sal-armoniac depurated, nine grains: mix, and make Pouder.

After vomiting, Take of the Pills of Mastic, a scruple; Extract of Agaric, give grains; Scammony sulphurated, two grains; distill'd Oil of Amber, two drops. With Essence of Amber make Pills. *Crato*'s Pills of Amber with Extract of Coloquintida, or the Pills call'd *Aloephanginæ*, are likewise proper. Or,

Take of sweet Mercury, fifteen grains; Scammony sulphurated, three grains: make a Pouder.

If the Swimming be inveterat, strong or frequent Purgatives are improper. 'Tis sufficient every new Moon or full Moon to give at Night a Dose of gentle loosening Pills, compos'd of Aloe, Gum Ammoniac, Myrrh, Mastic, and the like.

Blood-letting is for the most part noxious: But in a suppression of a wonted Evacuation, or a Redundancy, or Inflammation of the Blood, 'tis not improper.

Sneezing Medicines ought to be carefully avoided. Issues and Blistering Plaisters, are of excellent use for old Persons, or cacochymical Dispositions. In a suppression of the Piles, or disorders of the Womb, the Legs are their proper Seat. When the Paroxysm is over, the cure of preservation commences. For this purpose,

Take of Galangal, half an ounce; Cubebs, two drams; Sugar, a dram and a half: make a Pouder; Dose, two drams with Bisket dipp'd in Wine an Hour or two before Supper or Dinner. Or,

Take of Piony-seeds, Coriander-seeds, Nutmegs, Missel-to of the Oak, Cubebs, Galangal, of each two drams; long Pepper, Ginger, Tormentil-roots, and Rosemary-leaves, of each a dram. Make a Pouder; Dose, half a dram at pleasure.

Elixir Proprietatis with Spirit of Mastic, or Elixir of Mint, or Galangal mix'd with Amber, are proper to this purpose. Or,

Take of the Conſerves of Roſemary-flowers, of Sage, of Marjoram, of each half an ounce; Ginger candi'd in the *Indies*, Nutmegs candi'd, of each three drams; Rocket-ſeeds, Muſtard-ſeeds, of each a dram and a half; prepar'd Amber, two drams; Cardamom, Cubebs, Galangal, of each a ſcruple; volatil Salt of Amber, half a dram; Spirit of black Cherries, a dram. With Syrup of Clove-gilliflowers, make an Electuary. Doſe, the bigneſs of a Nutmeg Morning and Evening. For old Perſons Confection-*Alkermes* may be added.

Theſe are the proper Remedies for a ſymptomatical or leſs inveterat Giddineſs; but if it prove habitual, Specifics muſt be added. As,

Take of the Eſſences of Chervil, Sage, and common Baſil, of each a dram; Caſtor, a dram and a half; Amber, half a dram. Doſe, forty or fifty drops twice a Day. Or,

Take of Conſerve of Roſemary-flowers, three ounces; diſtill'd Oils of Boxwood, (which is much eſteem'd) Nutmegs and Mint, of each half a dram: make an Electuary. Doſe, half a dram.

Take of the Juices of Wormwood, Horehound and Stechas; Pouders, of Maſtic, Rhubarb, Germander and Ground-pine, of each three drams; Hyſſop, a dram; Agaric, two ounces five drams and a half: make an Electuary. Or,

Take of Triacle of *Andromachus*, and Conſerve of Sage, of each one part; Conſerve of Roſes, two parts. With Honey of Roſemary-flowers, make an Electuary.

Peacocks Dung is a famous Specific. 'Tis often dry'd and given in Powder with Sugar, or infus'd in Wine, or any convenient Vehicle; or given in the form of an Electuary with Conſerve of Roſemary-flowers. A compound Pouder may be preſcrib'd thus:

Take of Peacocks Dung, three ounces; Male Piony-roots, an ounce; Pouder of Cloves, three drams. Make a Pouder.

The Brains of Sparrows are recommended by ſome. As, Take the Brains of fifty Sparrows; Veal Brains waſh'd in Wine, and dried in Smoak, Filberds, of each an ounce; Mithridat, three drams. With Syrup of Citron-peel make an Electuary.

The Spirit of Harts-horn prepar'd with Amber, Caſtor, and Spirit of Sal-armoniac aniſated, are mightily approv'd for this purpoſe.

In

In the mineral Province Cinnabar is a famous Specific. Let it be us'd thus:

Take of Peacocks Dung in Powder, three drams; Cinnabar of Antimony or native Cinnabar, two drams; Cubebs, Galangal, and volatil Salt of Amber, of each half a dram: make a Pouder. Add as much of diſtill'd Oil of Aniſeeds mix'd with Sugar, as ſufficeth to render it grateful. Take now and then as much as will lie upon the Point of a Knife, or exhibit it in the following Mixture.

Take of Chervil-water, three ounces; Sage-water, an ounce and a half; Cinnamon-water, ſix drams; Spirit of Lilly Convally, and of Sage, of each three drams: mix for the uſe above-mentioned. Or,

Take of Chervil-water, three ounces; Spirit of Harts-horn with Amber, a dram: mix.

Amber may be given inwardly, and its Oil applied outwardly to the Crown of the Head: Rock Oil may ſupply the want of Oil of Boxwood. As, Take of Conſerve of Mint, an ounce; Conſerve of Roſemary-flowers, half an ounce; white Rock Oil, a dram: with Syrup of Mint make an Electuary. If you pleaſe, you may add fifteen grains of Salt of Amber. I have cur'd ſome with a Vomit and this Electuary alone.

In the laſt Extremity we have recourſe to Laudanum Opiatum mix'd with Amber or volatil Medicines, for often-times it proves more effectual than any other thing. As,

Take of Sage-water, an ounce and a half; Mint-water, an ounce; Spirit of Lilly Convally, three drams; Spirit of Salarmoniac, a dram and a half; Laudanum Opiatum, two or three grains; Syrup of Orange-flowers, three drams: Mix. Or,

Take of black Cherry-water, Mint-water, and Lilly Convally-water prepar'd with Wine, of each an ounce; Spirit of black Cherries, three drams; Eſſence of Caſtor, a dram and a half; volatil Salt of Harts-horn, a ſcruple; volatil Salt of Amber, half a ſcruple; Syrup of Clove-gillyflowers, half an ounce. Mix; and give a ſpoonful or two in the Fit.

If the Diſeaſe be caus'd by the Diſorders of the Womb, Take of Swallow-water, an ounce and a half; Baum-water prepar'd with Wine, an ounce; Spirit of Lilly Convally, Spirit of black Cherries, of each a dram; Spirit of Sal-armoniac, half a dram; volatil Salt of Amber, fifteen grains; Laudanum Opiatum, two or three grains; Syrup of Orange-peel, half an ounce. Mix, and uſe as above.

Eſſence of Caſtor, Spirit of Sal-armoniac, diſtill'd Oil of Amber, and in a word whatever is uſed in epileptic Fits, may be applied to the Head, Temples, Noſtrils, Breaſt, &c.

CHAP. II.

Of the irregular Incurſions of the Spirits into the external Parts.

THe Inſtruments of all Motion are the Fibres, whether gathered into a Muſcle, or diſpers'd in a Membran. The Muſcles (for the moſt part) receive Spirits from the *Cerebrum*, and their regular Motions depend upon the Will. The other Fibres are ſupplied with Spirits from the *Cerebellum*, and perform involuntary Motions. If either the muſculary or membranous Fibres are preternaturally mov'd, the former without the direction of the Will, or the latter with Violence and Pain; we call them *Convulſive* Motions. If the Part be contracted and remain immovable in the ſame poſture, 'tis call'd *Convulſio tonica*, and divided into ſeveral ſorts. If the Head be drawn forwards towards the Breaſt, 'tis call'd *Emproſthotonos*. Vid. *Hipoc. Sect.* 4. *Aph.* 35. If backwards, *Opiſthotonos*: If it be ſtiff and immovable to either ſide, *Tetanos*. The Convulſions of the Yard in a *Priapiſmus*, of the Jaws in a Dog Cramp, of the Knees, Arms, &c. are all included under this general. If the Contraction of the Part ceaſe and return alternatly, 'tis called a Concuſſion or *Convulſio Clonica*.

ART. I.

Of alternat Convulſions, and the Epilepſie or Falling-ſickneſs.

THe Epilepſie is an alternat Concuſſion of ſeveral Members of the Body, attended for the moſt part by a Ceſſation of Senſe. It admits of three Degrees. The firſt is not different from the third Degree of a *Vertigo*; of which above. In the ſecond, the whole Body is toſs'd with convulſive Motions, and the Senſes both internal and external, either remain in their wonted State, or become delirious. The Perſon is taken with Laughter, Crying, Screeking, and Singing; he beats his Breaſt, talks ridiculouſly, skips up and down the Room, and performs a great many antic Actions;

ons: And, when the Fit is over, is perfectly ignorant of all that pass'd. Melancholic Persons are obnoxious to it; and for them the Spirit of Harts-horn prepar'd with Amber is a proper Cure. This kind of Epilepsies is very unfrequent. But the third sort is very common, that is when the Body is thrown upon the Ground; all Reason and Sense abolished; the Thumbs shut close within the Hands; the Feet tremble; the Arms toss about; the Teeth gnash against one another, and bite the Tongue and Lips; Froth is cast forth at the Mouth; and the whole Body is successively lifted up and depressed. And when these Symptoms remit, the Person slumbers and groans; and when he comes to himself, complains of a Heaviness of the Head, and a Weariness of the Joints, but remembers nothing that pass'd.

The Part immediatly affected is the Fibres. If the external musculary Fibres are only affected, 'tis call'd an external Convulsion. If the internal are seiz'd, 'tis call'd internal. As in nephritic, colic, hypochondriac and hysteric Fits, and the Pains of Women after Delivery. These Convulsions of the internal Membranes are apt to cause Convulsions in the external Muscles, by communicating their Disorder to the Brain; and so produce an universal Epilepsie.

The immediat Cause is the rapid, unequal, and disorderly Motion of the Spirits; for the Spirits are equally the Cause both of natural and preternatural Motions. If the Sickness be inveterat or hereditary, perhaps the animal Spirits are degenerat from their natural Constitution, and become more elastic and moveable.

The remote Causes are, the irritation of any sensible Part, as the puncture of a Nerve; the collection of heterogeneous Particles in the Brain, or their mixture with the Spirits; as in Wounds of the Head, malignant Fevers, and the cessation of any wonted Evacuation of Blood. Sometimes the vicious Recrements of the Blood are convey'd to the Brain with the Lympha, and infect the Spirits, or mix with them; and sometimes they are lodg'd in other Parts. These noxious Particles are nitrosulphureous, and in some measure elastic, according to *Willis*; and the Nature of the Remedies used against them sufficiently proves them to be acid. Upon which account 'tis that scorbutic, hypochondriac and hysteric Persons are most liable to Convulsions: for the peccant Acid insinuats it self into the fibrous and tendinous Parts of the Muscles, and renders them stiff and unwieldy. And besides, supposing it did not lodge in the Muscle, it affects the

Nerves where-ever 'tis, and depraves the chylous Juice of the Glandules, especially those of the Mesentery, where it often lurks. This Acid is for the most part bred in the Stomach or first ways, and frequently produces Convulsions in gouty and arthritic Constitutions.

If the Brain or what it contains be immediatly affected without the intervening of any other Part, 'tis call'd an *Essential* Convulsion. But if another Part be first affected, 'tis *Sympathical*; as when Convulsions are caus'd by Worms, by the Disorders of the lower Belly, Ulcers or Aches of external Parts, the suppression of the Terms or Piles; neglect of Venery, causing a Corruption of the seminal Liquor in Women; the Indisposition of the Stomach, the Disorders of the Kidneys, Bladder and Mesentery; arthritic, melancholy and cholic Fits; Pains of Childbirth, &c.

When a Convulsion proceeds from any inferior Part, it resembles the Motion of a cold Vapor rising from the Part towards the Brain. But there is neither space for that Vapor to move in, nor a sufficient force to put it in Motion: Therefore 'tis a false Imagination, and ought to be rectified. The plain Case stands thus: The Part being irritated by the offending Cause, the Spirits repair in a disorderly manner into it, and contract the Fibres; these Spirits are follow'd by large Numbers of others, that not finding room in the contracted Part, rebound; this Convulsion is continued to the Original of the Nerve, and creates a Disorder in the Brain, which affects all the other Nerves, and produces the universal Epilepsie. So the gradual Contraction of the Part, and the disorderly Incursions of the Spirits, create a Sense not unlike to that of ascending Vapors, and occasion the vulgar Error. These imaginary Vapors are generally attended by a sense of Cold, by reason that the Spirits have not a free admission into the contracted Part.

Convulsions differ from Trembling in this, that the former invade the Part when resting; whereas the other follows only upon attempting some voluntary Motion. In a Palsie the Part affected may be mov'd or extended without pain, but in a Convulsion it cannot. In Swoonings or sleepy Diseases the Pulse is weak and low, and the Fits observe no regular Periods, nor are they easily carried off; but in the first degree of an Epilepsie, tho' it resemble Swooning, the Pulse is strong and frequent, and the Fit returning at set times is easily cured.

In

In acute burning Fevers, Convulsions are foretold from a tingling in the Ears, heavineſs of the Head, dulneſs of the Senſes, Panting of the Heart, Flushings of Light, and ſtrange Colors appearing before the Eyes. If in the beginning of the Diſeaſe, the Balls of the Eyes are ſeiz'd with Pain, without any Inflammation; or if the ſick Perſon attempt as it were to catch Flies, it betokens a *Delirium*, and Convulſions. But if he begin to pick at the Bed-clothes, or be ſenſible of the contraction or twitching of any Member, or of the ſeeming aſcent of Vapors to the Head, the Convulſion is juſt at hand.

If the Patient dote, and be uncapable to give an account of theſe Symptoms, the Phyſician may put his Hand to the Wriſts or tendinous Parts; and if he obſerve that the Tendons ſtart or quaver, 'tis a ſign of fatal Convulſions. An Epilepſie may be alſo propheſy'd in other Caſes from frequent Swimmings of the Head, and Night-mares.

If an Epilepſie proceed from Convulſions of the internal Membrans, it diſcovers it ſelf by a murmuring Noiſe in the Inteſtines, Swellings or Contractions or Hardneſs of the Belly, drawing the Navel inwards, violent Throws of the Guts, Pains in the Loins, a Diſtention and Contraction of the Breaſt, Difficulty of Breathing, an Apprehenſion of being Stifled, *&c.* If it be *eſſential*, it ſurpriſes the Perſon without any preceding Signs, or ſenſe of Pain; but a *ſymptomatical* Epilepſie is uſher'd in by the aching of ſome affected Part, and the apprehenſion of Vapors tranſmitted from thence to the Brain.

The Prognoſtics are variable according to the Circumſtances of the Patient. If an Epilepſie commence after the twenty fifth Year of the Perſons Age; if it ſucceed iliac Pains, acute Fevers, immoderat Watchings, exceſſive loſs of Blood, over-violent Purging, or the uſe of Hellebor; if the Fits return frequently, and the Lips, Tongue, Eye-lids, or Breaſt, be much affected; if the Diſeaſe be hereditary, eſſential, and inveterat; if the Patient does not ſneeze after uſing Medicines for that purpoſe: In all theſe Caſes there's a great deal of danger. If a Woman with Child be ſeiz'd with Convulſions, they threaten Miſcarriage. If it commence from the Infancy, or before the ſtate of Manhood, 'tis curable. If it return frequently, it renders the Perſon ſtupid or delirious. If a chronical Epilepſie be follow'd by an unmalignant Fever, 'tis a good Omen.

The Cure of Convulsions and the Falling-sickness of Children is accounted for elsewhere. As for adult Persons, the Physician must heedfully inform himself if the Cause be external or internal; if the Disease be *essential* or *symptomatical*; and if symptomatical, in what particular Member the Source of the Distemper lies. And withal he must carefully observe the following Remarks, which do not relate to the Paroxysm, but to the general Method of Cure.

1. That chronical Convulsions arising from internal Causes, do generally invade hypochondriac and scorbutic Persons, and are owing to a vicious Acid, which for the most part is bred in the first Passages. Therefore Evacuations, and the use of testaceous alcalin Pouders, Spanish Soap boil'd in Milk, and chalybeat Medicines, are recommended.

2. That if the Disease arise from any particular Member, the Medicines which properly regard that Part ought to be join'd with Specifics; but not exhibited till after the general Evacuations.

3. That antimonial Vomits are sovereign Medicines, if the Disease proceed from the internal Parts. They ought to be given every Month, four Days before the full Moon.

4. That all purging Medicines ought to be of the milder sort, and mix'd with sweet Mercury thrice sublimated; and exhibited before the Change of the Moon.

5. That if the Source of the Disease be lodg'd in the Humors of the Body, the Decoctions of the sudorific Woods, together with proper Specifics, are given with good success, after the first Passages are sufficiently cleans'd.

6. That in a desperat Case a Salivation with Mercury may be attempted.

7. That sneezing Medicines ought to be us'd every Morning. As for example,

Take of the Leaves of Marjoram and Rue, of each two drams; Flowers of the Lilly Convally, a dram; white Hellebor and Castor, of each half a dram. Make a Pouder.

8. That if the Distemper proceed from the Disorders of any external Part, 'tis proper to place a Ligature betwixt it and the Brain, just before the Invasion of the Paroxysm. Issues, Caustics applied to the Part (especially in the puncture of a Nerve) and opening the Skull with a Trepaniron, are of good use.

9. That if the Falling-sickness be attended by a Suppression of any wonted Evacuation of Blood, 'tis fit to open the Hemorrhoid Vein; or a Vein in the Arm, or in the Ancle of Women

Women with Child; or to apply Leeches to the inside of the Womb, when an Epilepsie follows Delivery.

10. That Opiats ought not to be given before the general Evacuations; nor too frequently repeated, left they promotea Stupidity, which generally insues upon chronical Epilepsies. They may serve to prevent and mitigate a fierce Paroxysm. They ought to be mix'd with Specifics and Camphyr, and given before the invasion of the Fit. The Temples, Nostrils and Wrists may be anointed at the same time with Oil of Box-wood, which has a peculiar anodyn Virtue.

11. That the Disorders of the Brain and animal Spirits ought to be redress'd by the use of epileptic Specifics and Anti-Acids; as the Bones and Dung of Animals, native Cinnabar, Castor, Vitriol, Amber, Misselto of the Hazel-tree, Piony, Opium, Camphyr, *&c.*

The true Cure of this Disease consists in preservation, and preventing the Paroxysm. Vomits are the first in order. Next are purging Medicines, which ought to be strongest in an essential Epilepsie.

Take of the Extract of black Hellebor, sweet Mercury right prepar'd, of each fifteen grains; Extract of Troches Alhandal, one or two grains; distill'd Oil of Amber, two drops: With Essence of Myrrh, or of Castor, make Pills. Or,

Take of the Conserve of Rosemary-flowers, a dram; Pouder of Jalap, half a scruple; sweet Mercury, fifteen grains: With the Syrup of Apples make a Bolus.

Sweet Mercury and *Mercurius Vitæ*, well pounded and exactly mix'd, prove laxative, and are mighty useful in this Case.

The Specifics for this Disease are very numerous; I shall briefly recount those that are most universally receiv'd.

In the vegetable Province Male Piony is a famous Specific, if gather'd in its proper Season; the neglect of which has abridg'd its Reputation. It ought to be gather'd at Noon-day in *July* or *August*; or before the Sun-rising, when both the Sun and Moon are in *Aries*, during the Wain of the Moon. It is both given inwardly, and ty'd about the Neck, with good success.

Next are the Flowers of Lilly of the Valley. They ought to be gather'd before the rising of the Sun, while they are wet with the Dew, and presently distill'd with Spanish Wine; which may be distill'd again several times upon fresh Flowers. If you infuse Castor in this Spirit, it extracts a noble Essence, which may be given from half a dram to a dram.

Hazel-

Hazelwood yields an excellent Spirit and Oil. The Miſſelto of this Tree, and the Catkins that grow upon it, are endow'd with an anodyn Sulphur, and are very ſucceſsful Specifics againſt this Diſeaſe. The Miſſelto ought to be gather'd in the Wain of the Moon in *March*, and may be given from half a dram to a dram. Miſſelto of the Oak is likewiſe uſeful. But while theſe Miſſeltoes are us'd, 'tis needful to purge now and then, leſt their fixing Quality ſhould occaſion other Diſeaſes. In the Spring we gather a Sulphur from the Catkins of Hazel, that may be given inwardly from a ſcruple to a dram.

The Miſſelto and Flowers of the Limetree, Boxwood, Lavender-flowers, Flowers of Dill, Angelica and Valerian-roots, Roots of Swallow-wort, Acorus, Briony, Seeds of Soap-wort and Rue, are much eſteem'd. Black Cherries, *Aſſa fœtida*, Camphyr, Spirit of Soot, Extract and Eſſence of the Wood of Aloe, are likewiſe Specifics. Some commend the Coals digg'd from under Mugwort, which *Deckers* takes to be the ancient Roots of Mugwort, reſembling Coals.

Theſe are the moſt noted vegetable Specifics, to which we generally add cephalic and aromatic Medicines. As,

Take of the Leaves and Flowers of Sage, ſix ounces; Flowers of Lilly of the Valley, three ounces; Flowers of ſweet Lavender, an ounce; Male Piony-roots, two ounces; Leaves and Flowers of Marjoram, half an ounce; choice Cinnamon, two ounces; Cubebs, half an ounce; Cloves, three drams; Mace, two drams: Infuſe them in fourteen Pound of Rheniſh or Spaniſh Wine. Let them macerat for fourteen Days; then diſtil in a *Balneum Mariæ*. You may add Caſtor, and Spirit of Sal-armoniac.

In the animal Province, the Spirit, Oil, and volatil Salt of human Blood taken from a beheaded Criminal, are celebrated Specifics. The Spirit of a human After-birth putrified, given from fifteen to forty Drops, is reſerv'd by ſome for a Secret: Or the Pouder of it dried in an Oven may be given from half a dram to a dram. The Skull of one that dies a violent Death, may be given in Pouder from a ſcruple to a dram. It yields a Spirit and volatil Salt of wonderful uſe; and its Oil when rectify'd and applied to the Crown of the Head, prevents the epileptic Fit. Oil of Amber diſtill'd with the Pouder of Man's Skul, yields a moſt penetrating Oil for the ſame uſe. The human Brain, its Spirit and Oil, and Bones of Men, are likewiſe much eſteem'd.

The Bones of other Animals, eſpecially the Teeth of a Sea-horſe, the Livers of green Frogs, the Liver of a Wolf, the Gall of a black Cat, the Spirit of Urine, the Blood of a hunted Hare, Caſtor, together with Spirits and volatil Salts, are much in uſe. As.

Take of volatil Salt of Amber, volatil Salt of a human Skull, of each a ſcruple; Caſtor, two drams: Infuſe in Spirit of Wine; let them digeſt and circulat; and they yield an admirable Tincture againſt this Diſeaſe.

Peacocks Dung, Quails Eggs, Spirit of Sal-armoniac prepar'd with Quick-lime, Spirit of Tartar, *Aſſa fœtida*, Elks-claws, Swallows, with the Spirits and volatil Salts, are common Specifics.

In the mineral Family: The fix'd Sulphurs of Antimony, lead the Van. Cinnabar of Antimony, ſublimated ſeveral times, and reduc'd to a fine Ponder, with ſome ſpirituous Water, is given in ſubſtance; or a Tincture may be extracted from it with ſome vegetable Spirit, that is of ſovereign Virtue in this Caſe. Or the Cinnabar may be diſſolv'd in a *Menſtruum* prepar'd from Nitre and Sal-gem; and precipitated in Cryſtals, which paſs by the Name of *Aſtrum Mercurii Secretum*. Native Hungarian Cinnabar is likewiſe very uſeful. But above all, the Sulphur taken from the Droſs of the *Regulus* of Antimony, after this manner: After you have ſeparated the *Sulphur Auratum* by a ſecond Precipitation, take the ſame ſtrain'd Liquor, and pour on ſome diſtill'd Vinegar and Spirit of Urine: It precipitates a noble Sulphur of incomparable uſe againſt an Epilepſie. Three grains may be given to adult Perſons.

Next to the fix'd Sulphurs of Antimony is Vitriol. Its fix'd anodyn Sulphur, and its ſulphureous volatil Spirit right prepar'd, are mightily applauded by *Helmont* and *Paracelſus*. The common Spirit of Vitriol is corroſive, not volatil; but the true volatil Spirit is drawn from Vitriol expos'd to the Air, and the preceding Phlegm is chamfer'd. The Spirit drawn from Vitriol and human Urine is an excellent Medicine; for the Alkali of the Urine diſſolves the metallin Sulphur, and the Spirit renders it volatil. In like manner any other vegetable Spirit, mix'd with Vitriol, yields a cephalic Spirit of Vitriol, which may be mix'd with Spirit of human Blood, and exhibited in an hereditary Epilepſie.

Amber concludes the mineral Catalogue. It yields a Spirit, volatil Salt and Oil, which may be mix'd with Spirit of Harts-horn, or of human Blood. Sometimes Camphyr

may

may be added; which is a noted Pacific, and of ſingular uſe, together with Opium, againſt the Epilepſies ariſing from the Womb.

The Methods of preſcribing theſe Specifics are as follows:

Take of black Cherry-water, Lilly Convally-water, and *Langius*'s epileptic Water, of each an ounce; Spirit of Harts-horn *ſuccinated*, or rectify'd Spirit of a human Skull, a dram; Syrup of Clove-gillyflowers, an ounce. Mix. Or,

Take of the Water of Lime-tree-flowers, Sage-water, black Cherry-water, of each an ounce; Spirit of Harts-horn with Amber, three drams; Spirit of Triacle camphoris'd, or Eſſence of Caſtor, a dram; Eſſence of Opium, a ſcruple; Syrup of Piony-flowers, an ounce. Mix, and give two or three ſpoonfuls twice or thrice a Day.

Take of the Water of Piony-flowers, three ounces; Water of human Brains diſtill'd with Wine, ſix drams; eſſential Spirit of human Blood, a dram and a half; prepar'd Unicorn, a dram; Cinnabar of Antimony, half a dram; Laudanum Opiatum, a grain and a half; Syrup of Arabian Stechas, an ounce. Mix, and uſe as above.

Take of the Water of Piony-flowers, two ounces; Miſſelto of Hazel, a ſcruple; native Cinnabar, mineral Bezoar, of each half a ſcruple; Hyſteric Laudanum, ſix grains; Syrup of Piony-flowers, half an ounce. Doſe, a ſpoonful twice or thrice a day.

Take of Fennel-water, and Water of Lime-tree-flowers, of each an ounce; Spirit of Sal-armoniac, Spirit of Harts-horn with Amber, of each half a ſcruple; Eſſence of Caſtor, a ſcruple; Syrup of Poppies, and Syrup of Arabian Stechas, of each half an ounce: mix as above.

Take of the Water of Piony-flowers, two ounces; Penny-royal-water, an ounce; Apoplectic Water, or *Langius*'s Epileptic Water, ſix drams; volatil Salt of Harts-horn, twelve grains; volatil Salt of Amber, ſix grains; Syrup of Piony-flowers, three drams: mix, and uſe as above.

As for Ponders. Take of Cinnabar of Antimony, half a dram; volatil Salt of Amber, twelve grains; Laudanum Opiatum prepar'd by Fermentation, two or three grains: make a Pouder for two Doſes.

Take of the Pouder of human Skull prepar'd without Fire, a dram; Cinnabar of Antimony, half a dram, or two ſcruples; volatil Salt of Harts-horn, twelve grains; volatil Salt of Amber, ſix grains: make a Pouder for four Doſes. Or,

Take

Take Cinnabar of Antimony, fifteen grains; volatil Salt of Harts-horn, volatil Salt of Vipers, of each four grains; Camphyr, two or three grains. Make a Pouder, as above. Or,

Take of diaphoretic Antimony, native Cinnabar, prepar'd Amber, of each eight or ten grains; volatil Salt of Amber, three or five grains; Laudanum Opiatum, one grain. Make a Pouder as above.

The common Vehicle for these Pouders, may be this following:

Take of the Water of Lilly Convally, black Cherry-water, and Water of Limetree-flowers, of each a dram; Essence of Rosemary-flowers, or Essence of Castor, from two drams to three drams; Essential Spirit of human Skull, a dram; Syrup of Clove-gillyflowers, six or eight drams: mix, *&c.*

As for external Remedies, some are wont to apply Amulets of Elder, or the Roots of Master-wort slic'd to the Thumbs and Toes; or Rings of the Teeth of Sea-horses, and the like. Cephalic Bags, Emplaisters, Ointments, and the specific Oils above-mentioned, may be applied to the Back-bone, Crown of the Head, and the affected Part. But a special regard must be had to the peculiar Constitution of the Patient; for some are extremely offended by the approach of odoriferous Oils. Oil of Amber and Oil of Spike, or the Fat of a wild Cat, may be applied to the Belly, when the Disease is symptomatical, both during the Paroxysm, and at other times. If the Epilepsie proceed from the Disorders of the Spleen, the Emplaister *de ranis cum Mercurio* is very useful. Upon other Occasions a Compound-plaister may be prescrib'd thus:

Take of the Emplaister *Diacalcitheos*, two ounces; *Diachylum Ireatum*, an ounce and a half; Emplaister of Betony, two ounces. Mix, *&c.* *Crato*'s Plaister is likewise very proper for this purpose.

Thus far I have consider'd the Method of preserving from, or preventing Epileptic Fits: My next Business is to shew what ought to be done during the time of the Fits. If the Person be plethoric, let Blood; but take care to draw forth but a small quantity. Then give a strong Emetic. If the temporal Muscles, or those of the Gullet, are so affected that the Person cannot open his Mouth or take down any thing, you must open the Mouth with a Spoon, and throw it in; or wet a Feather with the emetic Syrup, and a grain or two of *Mercurius Vitæ*, and thrust it into the Throat.

If a Vomit cannot conveniently be given, inject frequently ſharp Clyſters, adding to them antimonial Infuſions and volatil ſpecific Salts.

Sneezing Pouders ought to be cautiouſly us'd during the Fit, for they cauſe Convulſions. In room of them put Spirit of Sal-armoniac, or of Urine to the Noſtrils; or drop it upon the Tongue. The ſmell of Amber thrown upon the Coals is very effectual. The external Parts may be rubb'd, but withal very gently. If the Epilepſie proceed from any external Part, Ligatures are very proper. The Back-bone may be anointed with ſpecific Oils or Liniments. In the mean while 'tis not improper to throw into the Mouth two or three Spoonfuls of ſome epileptic Mixture, as above preſcribed.

If the Tongue be hurt by the Teeth, throw upon it the Pouder of Crabs-eyes, or anoint it with ſome vulnerary Extract and Sugar.

ART. II.

Of a Cramp or continu'd Contraction.

WHen a nervous Part is affected continually and without interruption, it becomes rigid and inflexible. The Cauſe of this Irritation may be either manifeſt or hidden. Of the former kind are the pricking of a Nerve, immoderat Purging, the unſeaſonable uſe of mercurial or antimonial Medicines, external Violence, drinking of *Aqua fortis* or acid Liquors (for all Acids have a contracting Virtue, as appears by Leather dipp'd in an Acid.) The hidden Cauſes are acute or malignant Fevers, Inflammations, Gout, arthritic and hypochondriac Fits, (in which the prevailing Acid fixes in tendinous Parts, and renders them ſtiff) Collections of Serum in the Brain, and Worms in the Guts, which are for the moſt part accompany'd by Swellings of the Belly. Sometimes a flatulent ſerous Humor affects the Muſcles, and cauſes a Contraction. Sometimes the offending Cauſe is lodg'd in the contracted Part, and ſometimes elſewhere.

As for the Cure, the univerſal Evacuations are firſt in order, eſpecially the injection of ſharp Clyſters. The internal Specifics are the ſame as in the caſe of an Epilepſie.

For external uſe, all ſpirituous and oily things are proper; but ſuch of 'em as are more penetrating than viſcid or unctuous are preferable, as the Oil of Worms *per deliquium*. Or,

Take

Take of the Oil of Orris, Oil of Earth-worms, of each two ounces; Castor in Pouder, four scruples: mix them by continual shaking, and anoint the contracted Part without intermission till the Convulsion cease.

The Oil that drops from a rosted Goose; the Spirit of Wine with Saffron; Spirit of Triacle camphoris'd with Castor; the Decoction of stale Urine with white Bread mix'd with a small quantity of *Assa fœtida*; Oil of Amber mix'd with Petrol, (when the occasional Cause is of a cold nature) are much approv'd for the same use. Or,

Take of Oil of Turpentine, Oil of Earth-worms, of each an ounce and a half; human Fat, an ounce; the Fat of Dogs, half an ounce: make a Liniment. Or,

Take of human Fat, three or four ounces; distill'd Oil of Turpentin, three drams; Oil of Juniper-berries, two drams; Oil of Spike, half a dram: make a Liniment. Or,

Take of Oil of Turpentine, half a dram; distill'd Oil of Cloves, six drops; Mucilage of Briony as much as sufficeth for a Liniment.

When a Nerve is prick'd by an error in Blood-letting, the Wound must be dilated, and distill'd Oil of Turpentine, or of Wax, or of Bricks, dropp'd into it warm. If the Wound be large, apply the following Plaister.

Take of Euphorbium, a scruple; Turpentine, half an ounce; with Wax make a Plaister.

If after scarifying or letting of Blood the Part swell and ache, anoint it frequently with the following Liniment.

Take of the Fat of Foxes, Fat of Badgers, of each three ounces; distill'd Oil of Spike, half an ounce; Oil of Mastic, two drams; Wine, two or three drams: mix 'em before the Fire, and use it hot.

If the Part be livid, swell'd, and affected with Pain, apply the following Cataplasm.

Take of the Herbs Agrimony, Chervil, and Flowers of Chamomil, of each a handful; Roots of Larks-spur, three ounces; Roots of *Solomon's* Seal, an ounce; Linseeds, Fenugrec-seeds, of each half a dram: Boil them in a sufficient quantity of Water to the Consistence of a Cataplasm.

If the Convulsion proceed from a Wound in the Part, drop into it the Balsam of Sulphur with Turpentine, and anoint the Part with Oil of Worms, and distill'd Oil of Turpentine. If it be caus'd by a poisonous Animal, anoint with Oil of Scorpions; apply scarify'd Cupping-glasses, or an actual Cautery to the Part, or the magnetic arsenic Plaister; and give

in-

inwardly *Venice*-Treacle with Gentian, in order to procure Sweat. If it be occaſion'd by violent Purgation, give *Venice* Treacle with Opiats.

For a windy Cramp, take a rough Cloth hot and dip it into Spirit of Juniper-berries, or rectify'd Spirit of Wine, and rub the Part; or foment it with the Spirit of Triacle and Juniper-water. In caſe of extremity apply the following Ointment.

Take of freſh Gooſe-tallow, four drams; diſtill'd Oil of Cloves, half a ſcruple; diſtill'd Oil of Cinnamon, five drops. Mix for an Ointment.

Volatil Anti acids, Milk, and ſuch like temperat things are proper for the Convulſions which proceed from an internal Acid.

ART. III.

Of Trembling.

TRembling reſembles Convulſive Motions, and when it follows Epileptic Fits, partakes of their Nature. Some particular Members are apt to ſhake after Drinking or ſudden Paſſion; but this is a leſſer ſort of trembling: For ſome are univerſal, ſome particular; ſome greater, and ſome leſſer. It does not proceed from any weakneſs of the moving Faculty, but from the joint Action of ſeveral Muſcles that are either Antagoniſts, or imploy'd in different Motions of the Member, which is occaſion'd by the almoſt equal Incurſions of the animal Spirits: whereas upon the Will's injoining a particular Motion, they ought to repair more copiouſly to the Muſcle, whoſe Office 'tis to perform the commanded Motion, than into its other Companions that are ſuppoſed to reſt.

The animal Spirits are apt to commit this Error, when diſorder'd by Paſſion, or over-fix'd by the uſe of Narcotics, or exceſſive drinking of Wine. But often-times the Spirits themſelves are innocent, and the fault lies either in the Nerve or the Muſcle. If any Obſtruction or Irritation happen at the head of the Nerve, the Spirits deſign'd for the Muſcle are diverted another way. If the Fibres of the Muſcle be contracted, dry, miſplac'd, or not ſo acceſſible as they ought to be, the regular arrival of the Spirits is prevented.

Thus

Thus mercurial Steams, immoderat Venery, Cold, drinking of cold Liquors, ſuppreſſion of wonted Evacuations, and malignant Fevers, are wont to occaſion a Trembling.

Trembling is eaſily diſtinguiſh'd from a Palſie, by the performance of the voluntary motion; and from Convulſions by this, that it never appears but when a voluntary motion is attempted.

If it ſucceed to a Palſie, it prognoſticats a Recovery. If it proceed from internal Cauſes, it ought not to be neglected. If it be hereditary, of a long ſtanding, or accompany'd by old Age, it ſeldom admits of a Cure. If it terminat in Convulſions, or approach to their Nature; If attended by Doating in burning Fevers; If it ſucceed to Child-birth, or happen in a Lethargy or Apoplexy; it portends ill. If the Under-lip quaver, it betokens Vomiting.

The occaſional Cauſe muſt be diligently inquir'd after, and remov'd. So the method of Cure muſt be calculated for the various Cauſes. In general, it requires cephalic and nervous Medicines, ſuch as are us'd againſt Palſies, Convulſions, and Apoplexies. Sage is a noted Specific in this caſe; it may be eaten with Food, and infus'd in Ale; or a Spirit or Eſſence may be taken from it, and mix'd with Caſtor, to be us'd inwardly often. The Hands or Part affected may be fomented with this Spirit, or an Infuſion of Sage in Wine or Water us'd for a Waſh. Baum is next; its Leaves infus'd in Wine, or Spirit of Wine, make a uſeful Medicine for this purpoſe. Juniper-berries, their Spirit, Oil, Rob, Infuſion in Wine or Spirit of Wine, and the infus'd Berries in ſubſtance, are very ſovereign in this caſe. After due Evacuations, there is nothing ſo proper as a Diet-drink of the Decoction of Woods, eſpecially of Juniper-wood.

Nutmegs, Cinnamon, Cloves, Caſtor and its Preparations, the Brains of Hares roſted, *&c.* are mightily eſteem'd.

Peacocks Dung infus'd in Spirit of Wine is a ſovereign Remedy againſt Trembling in old Age. The Oils of Hazel-wood and Box-wood are alſo very proper.

If it proceed from metallin or mercurial Fumes, Cinnabar of Antimony and antimonial Sulphurs ought to be mix'd with human Bones, and exhibited in order to procure Sweat. The Decoction of Elecampane and Fennel-roots in Wine, taken Morning and Evening, the Perſon being cover'd in order to ſweat, is famous for expelling and correcting Mercury in the Body. Leaves of Gold, or Medicines partaking

of Gold, are proper in this caſe to be given inwardly; and an Ointment of Gold may be applied outwardly.

As for external Remedies, *Foreſtus* recommends rubbing and waſhing the Part with freſh Urine. In room of which you may uſe what follows.

Take of *Aqua Articularis* for external uſe, three or four ounces; Spirit of Earth-worms, an ounce and a half; Spirit of Ants, ſix or eight drams; Eſſence of Caſtor, three or four drams: mix, and bathe the Part affected.

Petrus à Caſtro orders the Part to be frequently fomented with diſtill'd Water of Nettles. The Leaves of an Aſh infus'd in Lees are commended. If the Trembling be inveterat, the natural Bathes, or artificial Bathes of a Decoction of Ants ty'd in a Bag, are incomparably uſeful.

CHAP. III.

Of the Diſeaſes in which the animal Spirits ceaſe to move.

ART. I.

Of an Apoplexy.

WHen Perſons are ſeiz'd with Apoplexies, they are like dead People in every reſpect, except the beating of their Pulſe, Breathing, and the Colour of their Faces. If the Reſpiration be much impair'd, the Pulſe very low, and ſcarce perceptible, and the Perſon ſnort, and froth at the Mouth, 'tis a violent Fit. If the whole Body be equally ſeiz'd, 'tis an univerſal Apoplexy. If only one ſide of the Head and Body, or the Trunk of the Body alone, or a particular part by it ſelf, be affected while the others are at eaſe, 'tis call'd a particular Apoplexy. 'Tis uſual among Writers to refer the Apoplexies of particular Parts to Palſies; but indeed theſe Diſorders of particular Members proceeding from internal Cauſes, and call'd by them Paralytic, were by the Ancients accounted ſlight Apoplexies. *Vide Hip. Sect.* 2. *Aph.* 42.

The Cauſe of Apoplexies may be deriv'd from the failure of the motion of the animal Spirits, either in the *Cerebrum* or *Cerebellum*. If in the latter, the Circulation of the Blood and Motion of the Heart are in a manner quite extinguiſh'd. If the animal Spirits be hindred to viſit the Heart by the Con-

Convulsion of its Nerves, or such other Causes, the same effect will follow. These Causes are call'd *Privative*, which do not effect the Spirits immediatly, but only prevent their Excursions, or withdraw the Matter of their Generation, as all Obstructions of the Brain, a Fall, &c. The positive Causes are such as stupifie the Spirits, or render 'em unfit for performing their Office, as narcotic Medicines, &c.

A privative Apoplexy is occasion'd by stopping the Circulation of the Blood. This is caus'd either by an Obstruction in the Brain imprisoning the Spirits; or by the compression, tearing or breaking of the Blood-vessels. As, when external Violence is us'd, an Apoplexy may be caus'd by the Ligature or Compression of the carotid Arteries, and consequently the interruption of the Blood in its Passage to the Brain. This *Hippocrates* understood by his *Obstructio Venæ*, it being customary among the Ancients to signifie by Veins the Arteries and Nerves. The other privative Apoplexies proceeding from internal Causes, or rather owing to the stoppage of the Blood in the Veins, and its subsequent stagnation in, or distention of the Brain; for suppose one of the carotid Arteries were straiten'd by some internal Cause, the other Artery communicating with it, would supply the Brain with Blood, and so no Apoplexy would insue upon that occasion. 'Tis the hindrance therefore of the Reflux of the Blood, and its subsequent stagnation, that in internal cases distends the Brain, straitens its Passages, extinguishes the Motion of the animal Spirits, and so causes the Apoplexy.

Sometimes the Blood is so thick and congeal'd, that of it self it stops in the Vessels within the Brain, without any determination to that effect from the Blood-vessels; as in *Heart-swooning*, which is a case not only parallel, but near akin to this, it stagnates in the Lungs.

The Ancients deriv'd the cause of an Apoplexy from a Collection of Serum in the Ventricles of the Brain; but anatomical Dissections make it appear, that the Brains of apoplectic Persons are not always molested with any such Matter; and that several People are, who were never seiz'd with an Apoplexy in their Lives. It remains therefore to be concluded, that the immediat Cause of all Apoplexies is the Abolition either of the Motion of the animal Spirits, or of the Circulation of the Blood.

The remote Causes with reference to a defective Circulation of the Blood, are, sudden Cold, excessive Heat, gormandizing

dizing in a ſedentary way of living; waſhing the Head with warm Water, and then expoſing it to the Cold; Swellings in the Skull; ſuppreſſion of wonted Evacuations of Blood; uſing Dragons Blood after violent Purges; immoderat Venery, eſpecially in old Age; Anger, and all turbulent Paſſions of the Mind.

With reference to the Motion of the animal Spirits, the remote Cauſes of Apoplexies are a Contuſion or violent Commotion of the Brain, by Thunder, Cannon ſhooting, &c. any ſudden and impetuous Force that drives inwards the Lymph which waters the cortical part of the Brain; Impoſtumes or any vicious Matter lodg'd in the Head; all which ſtraiten the Paſſages of the Brain, and Original of the Nerves, and ſo cramp the Spirits that they cannot perform their wonted Offices.

Exceſſive Drinking may occaſion a Prevalency or Redundancy of Serum in the Brain, that preſſes down the Walls of the Paſſages. Accordingly we ſometimes meet with great Quantities of Serum in diſſecting the Heads of ſuch as die of Apoplexies. The Small-pox or Scab ſtruck inwards, and ſeveral other Cauſes, may likewiſe produce the ſame effect. Upon this account I ſhall not ſcruple to admit the diſtinction of privative Apoplexies into ſuch as are Sanguin, and thoſe which are Serous; tho' a nice Theoriſt might cavil againſt it. The former kind is apt to invade thoſe whoſe Blood is thick and prone to congeal; the latter for moſt part ſeizes old decrepit catarrhous Conſtitutions.

Mercurial and ſubterranean Vapors not only clog the Spirits, but thicken the Blood, and ſo cauſe a privative Apoplexy. As for poſitive Apoplexies caus'd by an immediat Depravation and Fixation of the Spirits, I am of *Helmont*'s Opinion, that not only external Things, but an internal Ferment bred in the Stomach often-times cauſes 'em. This I am induc'd to believe by theſe Conſiderations.

1. Vomits, ſharp Clyſters and ſtomachic Medicines are ſovereign Remedies againſt a poſitive Apoplexy; which is a ſign that the Stomach is concern'd. 2. The Steams of Coals, Smoak of Tobacco, and eating ungrateful Food, cauſe Apoplexies. Now undoubtedly theſe affect the Mouth of the Stomach moſt immediatly. 3. I remember an Inſtance of a Woman that was ſeiz'd with a poſitive Apoplexy, of a ſudden, without any known Cauſe: her Spirits were not exhauſted or deficient, but ſhe had an invincible Propenſity to Sleep, with a grievous Anxiety and Trouble in her Breaſt;

and after Recovery happening to take a Vomit upon another Occasion, was thrown into the same Symptoms again. Now, as I take it, the Source of the Disease lay in the Stomach, and the Vomit waken'd it afresh. 4. A Giddiness proceeding from the Stomach is frequently a Fore-runner of an Apoplexy; and where this is hereditary to a Family, that is a sure ground of Prediction. 5. *Poterius* his diaphoretic Gold and Cinnabar of Antimony are Specifics against Apoplexies. Now they do not positively reach further than the first Passages. 6. The sudden and surprizing Way of Invasion of some Apoplexies, seems to intimate that there is a virulent Ferment in the Body which immediatly extinguishes or fetters the Spirits.

Supposing therefore that there is a virulent Ferment bred in the Stomach, we can give no other account of its manner of Operation than this, that as Opium in the Stomach disposes the Spirits to Sleep, so it fixes 'em to an apoplectic height.

When an universal Apoplexy terminates in a particular one, if it be sanguin, I doubt 'tis uncurable, unless it yield to Blood-letting. But perhaps the clotted Blood may have left some Serum in the Brain, which falls deeper upon the spinal Marrow, or is thrown upon some particular Nerves; or if the Apoplexy was originally lymphatic, the Lymph may have sunk in, and so caus'd an Obstruction of some particular Nerves. This Solution will serve for privative Apoplexies; but as touching the positive, I am at a loss to advance any plausible Reason, unless you admit of this, that the Contraction of the upper Extremity of the Nerves, near to their original Insertion, may produce a mere Apoplexy, without Convulsions, which always insue upon the contraction of their outward Parts.

The Signs and Prognostics of an Apoplexy are these: The Person is seiz'd with a profound Sleep, depriv'd of all Sense and Motion; the Respiration remains intire more or less, according to the Violence of the Fit. If the Patient froth at the Mouth, the Respiration is e'en almost abolish'd; for the Froth is the Blood stagnating in the Lungs, impregnated and rarify'd by Air, and so thrown up. This is a mortal Sign according to *Hipp. Sect.* 2. *Aph.* 43. for all that die of Apoplexies, are actually stifled. But we ought carefully to distinguish this Froth of Blood, which is of a whitish red Color, and cast up from the bottom of the Breast, from the thin Spittle-like Froth, caus'd in the Palat by the Agitation

of Air in a viſcid Humor. If the Apoplexy proceed from a ſtagnation of the Blood, the Face and Eyes are bloated, and of a red color, and the Body it hot; otherwiſe they are pale and cold. If the Perſon ſnort high, 'tis an ill Omen. If the Memory decay of a ſudden, 'tis a Preſage of an Apoplexy. Sometimes the Urine and Excrements are voided without the Perſon's ſenſe, by reaſon of the relaxation of the Sphincters.

A poſitive Apoplexy is diſtinguiſh'd from a privative by the Conſtitution of the Patient, of which above; and the Anxieties of the Breaſt attending the former. An Apoplexy is diſtinguiſh'd from a *Syncope Cardiaca*, or Heart-ſwooning, by this, that the latter is not attended by Snorting; the Reſpiration in it is always extremely difficult, and the Breaſt mightily troubled, the Face pale, the extreme Parts cold; a cold Sweat breaks forth, and the Pulſe is very weak, and not ſo hard as in Apoplexies.

'Tis diſtinguiſh'd from Hyſteric Fits, by this; that in theſe the Face is always pale, the Pulſe very low and imperceptible, Reſpiration pretty intire, the ſenſe of Feeling oftentimes remains; and the Diſorders of the lower Belly have uſher'd 'em in.

A *Carus* ſteals on by degrees, and the Reſpiration is eaſie, and often-times without Snorting. But an Apoplexy purſues a contrary method.

If a violent Apoplexy be not follow'd by a Fever in ſeven Days, 'tis mortal. If a Difficulty of Breathing be attended with Sweating, 'tis a fatal Omen. If the Fit perſiſt beyond twenty four Hours without remiſſion, there's no hope. In general, all apoplectic Perſons, tho' cur'd, are apt to relapſe, and young ſtrong Perſons are more likely to recover than the old and feeble.

If it be not mortal, it either determines in a particular Apoplexy, or is diſcuſs'd by Stool and Sweating. *Barbette* relates an Inſtance of its being cur'd by voiding Lymph by the Ear, and upon that account recommends a Salivation for its Cure.

In preſcribing the Cure I ſhall firſt take notice of what is fit to be done during the Paroxyſm; and then how we ought to behave after the Paroxyſm is over.

As for the time of the Fit; ſharp Clyſters and Suppoſitories are approv'd by the general Conſent of all Phyſicians. They are proper in all apoplectic Caſes. They muſt be ſharp to the laſt degree, injected in moderat quantities,

in

in order to be eaſily retain'd; and in caſe of a total relaxation of the Sphincter, repeated often; or converted into Cataplaſms by longer boiling, and applied all over the Belly.

Vomits and Blood-letting are generally preſcrib'd; but unſeaſonably adminiſtred, they murder a great many. In order to avoid Miſtakes in this important Matter, let us mind the following Cautions:

If the Patient be young, luſty, accuſtom'd to a ſedentary Life; if the Face in the Paroxyſm appear red, if there be a ſuppreſſion of any wonted Evacuation of Blood: In a word, if there appear any Signs of a ſanguin Apoplexy, or a Stagnation of Blood, 'tis highly convenient to bleed. In a ſerous Apoplexy, Bleeding can only act a preſervative part. In a poſitive internal Apoplexy, it can do no manner of good, unleſs by accident, by correcting the Stagnation of the Blood in the Breaſt; upon which account it may be uſeful in the other ſorts.

If the Apoplexy be attended with Crudities in the Stomach, occaſion'd by drinking and gluttonizing, as it frequently happens in *Germany*; If the Patient be old or weak; If any narcotic Virulence be ſuſpected, or any Deficiency diſcover'd in the Lymph, while the Blood is originally faultleſs; If a Giddineſs or any Sign of a principal Diſorder in the Head appear; 'tis more adviſable to omit Bleeding, and adminiſter a Vomit. To ſum up all, a privative Apoplexy requires Bleeding; or if the Patient be old, Cupping-glaſſes, Scarifications, *&c.* A Poſitive demands Vomiting, or in room of that for old Perſons ſharp Clyſters, which turn to the ſame thing; for the Guts are a continuation of the Stomach. Some recommend Bleeding from the jugular Veins. As for Vomits, the Doſe muſt be augmented in the Paroxyſm; and if one do not operat, repeated till they prove effectual. 'Tis moſt convenient to exhibit them in a liquid Form, with ſome ſpirituous cordial Water.

The Perſon ought to be ſet upright, whether in Bed or out of Bed; the Room well air'd, and the more ſenſible Parts of the Body frequently twitch'd and pull'd. Then let Blood in the right Arm, if it be convenient; and exhibit a Vomit with all poſſible expedition, or inject a Clyſter of aromatic Herbs with Pulp of Coloquintida, or Infuſion of *Crocus Metallorum*, with Sal-gem or Sal-armoniac, and other volatil Salts. All oily Ingredients muſt be omitted. As,

Take of the Leaves of Tobacco and Sage, Chamomil-flowers, of each a handful; Roots of Pellitory of *Spain*,

from half an ounce to six drams; Pulp of Coloquintida ty'd in a Bag, a dram. Boil in a sufficient quantity of Water. To nine ounces of the Liquor strain'd, add Honey of Roses, or of Rosemary-flowers, half an ounce, or six drams; Electuary of Hiera with Agaric, from half an ounce to an ounce; Castor in Pouder, from a scruple to half a dram; Sal-gem, from half a dram to two scruples: Mix for a Clyster. Or,

Take of the Decoction of Rue, in which half a dram of *Crocus Metallorum* hath been boil'd, nine ounces; Bulls Gall thicken'd, a dram and a half; Extract of Troches Alhandal, half a scruple; Honey of Rosemary-flowers, an ounce and a half: Mix for a Clyster. Or,

Take of the Decoction of Chamomil-flowers, half a pound; Infusion of *Crocus Metallorum* in Wine, two or three ounces; Honey, from half an ounce to an ounce: Mix and make a Clyster. As for Suppositories,

Take of the Roots of white Hellebor in Pouder, Scammony sulphurated, Troches Alhandal, of each half a scruple; Castor in Pouder, eight grains; Sal-armoniac, a scruple. With a sufficient quantity of Honey make a Suppository.

In the interim, some apoplectic Mixture may be thrown down the Throat. As,

Take of strong apoplectic Water, an ounce; Water of Lilly Convally, half an ounce; *Matthiolus*'s Quintessence, two drams; Spirit of Hartshorn, a dram; Syrup of Clovegilly-flowers, half an ounce; Mix.

Spirit of Black-cherries is of extraordinary virtue in this case. As,

Take of Black-cherry-water, Mint-water, of each an ounce and a half; Spirit of Black-cherries, six drams; Spirits of Harts-horn succinated, or Spirit of Sal-armoniac, or Spirit of human Blood, two or three drams; distill'd Oil of Amber, four or six drops; Syrup of Clovegilly-flowers, half an ounce. Mix and give a Spoonful now and then.

Take of Lavender-flower-water, Sage-water, of each an ounce; *Langius* his epileptic Water, six drams; Essence of Castor, a dram and a half; Spirit of Sal-armoniac, one dram; distill'd Oil of Amber, eight drops; Syrup of French Lavender, an ounce: Mix, &c.

Take of apoplectic Water, two ounces; Water of Swallows with Castor, an ounce; Spirit of Triacle camphoriz'd; Spirit of Harts-horn succinated, of each three drams; Confection Alkermes, half an ounce: Mix as above.

Take

Take of Lilly-convally-water prepar'd with Wine, an ounce and a half; Elder-flower-water, an ounce; Carminative-water, half an ounce; Spirit of Harts-horn ſuccinated, a dram and a half; Confection Alkermes, a dram: Mix as above.

Timæus's *Arcanum* is of excellent uſe in a ſpeechleſs Fit; *viz.*

Take of volatil Salt of Amber, half a dram; Triacle of *Andromachus*, a dram and a half; Pouder of Caſtor, two ſcruples; diſtill'd Oils of Rue and Roſemary, of each three drops: make an Electuary. Doſe as much as will lie upon the Point of a Knife, to be exhibited in ſome apoplectic Vehicle. The Palat and Tongue may be rubb'd with this Electuary, or diſtill'd Oils and apoplectic Spirits. As,

Take of Lilly-convally-water prepar'd with Wine, two ounces; Spirit of Juniper-berries, an ounce; Eſſence of Caſtor, three drams; volatil aromatic Salt, half a dram; Mix for the above-mentioned uſe.

This Method being obſerv'd, if the ſick Perſon do not come to himſelf in a quarter of an Hour, blow the following Pouder into the Noſtrils, *viz.*

Take of the Roots of white Hellebor, and Pellitory of *Spain*, Marjoram-leaves, Flowers of Lilly of the Valley, Caſtor, of each a ſcruple; Make a Pouder, and uſe as above. Or, add ſome drops of the diſtill'd Oils of Cloves and Marjoram.

Spirit of Urine, Spirit of Sal-armoniac, and Spirit of Harts-horn ſuccinated, are fit for the ſame uſe; or the Fumes of Caſtor and Amber may be receiv'd at the Noſtrils; and the Temples and Noſe anointed with apoplectic Balſams, or bath'd with the following Mixture.

Take of Baum-water, Lilly-convally-water prepar'd with Wine, of each two ounces; apoplectic Water, an ounce; Vinegar of Rue, two drams. Mix, *&c.*

The rectify'd Oil and volatil Salt of Amber, mix'd with apoplectic Waters, are given inwardly with wonderful ſucceſs; or drop'd into the Ear with Camphyr, or Oil of Camphyr. The Back, Neck, Temples and Stomach, may alſo be fomented with it, or the following Mixture.

Take of expreſs'd Oil of Mace, a dram and a half; diſtill'd Oil of Rue, a ſcruple; Oil of Spike, Oil of Amber, of each half a ſcruple. Or,

Take of white Rock-Oil, two drams; diſtill'd Oil of Amber, a dram; diſtill'd Oils of Lavender, Marjoram and Sage, of each a ſcruple; mix and anoint the above-mentioned

tioned parts; but withal we muſt be cautious in not overdoing, leſt the Head be affected by an indiſcreet quantity of odoriferous Oils applied to the Body.

If the Paroxyſm do not yield to theſe Medicines; the Vomits and Clyſters muſt be repeated, bliſtering Plaiſters applied to the Neck, Arms, Thighs, Wriſts, behind the Ears, &c. the Feet rub'd and chaf'd with Pickle, or Vinegar and Salt, and the external Parts of the Body prick'd and twitch'd.

Having thus diſcuſs'd the Fit, it remains now to corroborat Nature, and prevent future Paroxyſms by a preſervative Cure. For which purpoſe, after Purgation, Sudorifics and Stomachics are moſt proper. Sage is much applauded; as alſo Cubebs, Cardamom, Rocket-ſeeds, and Muſtard-ſeeds. As,

Take of Cardamoms, half a dram; Coriander-ſeed, two drams; Rocket-ſeeds, half an ounce: make a Pouder for ſeveral doſes to be taken when going to Bed. 'Tis a very good Preſervative. If an Electuary be more acceptable,

Take three large Figs, and a ſpoonful of Rocket or Muſtard-ſeed; mix them in a Mortar, adding a ſpoonful of ſtrong Lavender-water, and half an ounce of the Juice of Violets. Doſe, the Bigneſs of a Walnut to be taken every Morning, and after Dinner. Let the Perſon take ſome drops of Spirit of Sal-Armoniac aniſated, or the Carminative Spirit *de tribus*.

Some diſtil a urinous Spirit from Rocket-ſeeds and Quick-lime, which is of admirable uſe. Spirit of Black Cherries is receiv'd by all as a great Specific; and likewiſe the Spirit of Vitriol, thus prepar'd.

Take of Hungarian Vitriol calcined in the Sun, a convenient quantity; with Spirit of Wine drawn off from Aromatic Plants, reduce it to the conſiſtence of a Pultiſe. Let it ſtand and digeſt ſome Weeks, and then diſtil with an open Fire. Take the Spirit thus drawn off and diſtil it thro' an Alembic; 'twill come off chafer'd; when it appears Cloudy, change the Receptable, and receive a volatil Spirit of Vitriol. Mix all the Spirits, and after digeſtion cohobat them.

Mæbius his Apolectic Spirit is verp uſeful; *viz.* Take of the Flowers of Lilly Convally ſix pound; Cinamom one pound; Zedoary half a pound; Saffron an ounce; Mace and Cloves, of each half an ounce. Let them digeſt in Spaniſh Wine for a Month, and then diſtil the Spirit, in which ſteep the following Ingredients.

Take

Take Roots of Valerian, Swallowwort and Piony, of each two ounces; the Leaves of Baum, Oak of *Jerusalem*, and Rosemary, of each three handfuls; Lime-tree-flowers six handfuls; Flowers of Lavender, Spike, Sage and Thyme, of each a handful. Macerat them in the Spirit for a month in a close Vessel; then add a sufficient quantity of Spanish Wine, and distil the Spirit, which may afterwards be rectify'd upon Amber, Mosch and Camphyr. 'Tis a noble Apoplectic Medicine; but is not fit to be given in the Paroxysm: For such inflammable oily Spirits have a stupifying quality, and are very offensive to some People. In a sanguin Apoplexy, the volatil urinous Spirits, and lean volatil Salts are preferable to these sulphurous Medicines.

Essence of Castor mix'd with vegetable Spirits, Spirit of Sal-Armoniac camphoris'd, the volatil Salts of human Blood, human Scull, &c. are all much approv'd. In fine, from the infinit variety of Apoplectic Medicines, I shall single out the following Recipe's.

Take of Quintessence of Rosemary, two drams and a half; Quintessence of Lavender, a dram and a half; mix, and give twenty drops every Morning; and in the Evening thirty drops of Spirit of Sal-Armoniac. Or,

Take of the Essence of Castor, a dram and a half; Spirit of Sal-Armoniac anisated, Spirit of Sal-Armoniac succinated, of each a dram. Dose, thirty or forty drops twice a Day.

Take of the Waters of the Flowers of the Lime-tree, Lavender and Primroses, of each an ounce; Apoplectic Water, Spirit of Black Cherries, of each a dram and a half; Essence of Primroses, three drams; volatil Salt of Amber, half a dram; Syrup of Clove Gilly-flowers, an ounce and a half. Mix. Dose, two spoonfuls every three hours.

Take of Mint Water, Lilly Convally Water, Black Cherry Water, of each an ounce; Spirit of Black Cherries three drams; Essence of Castor a dram and a half; volatil Salt of Hartshorn, a scruple; volatil Salt of Amber half a scruple; Syrup of Clove Gilly-flowers half an ounce.

Poterius's Diaphoretic Gold, given with Conserve of Clove Gilly-flowers, is a famous Specific; Likewise the following Pouder.

Take of prepared red Coral a dram; Cinnabar of Antimony half a dram; volatil Salt of Amber a scruple; Cubebs half a dram. Make a Pouder. Or,

Take

Take of the Conſerves of Roſemary and Lavender-flowers, Conſerve of Baum, of each an ounce; candy'd Orange-peel, ſix drams; candy'd Ginger, half an ounce; Muſtard-ſeeds, Rocket-ſeeds, of each three drams; Cubebs, Cinnamon, Cardamoms, volatil Salt of Amber, of each a dram. With Syrup of Clove Gilly-flowers make an Electuary.

Take of Conſerve of Mint two ounces; Conſerve of Roſemary-flowers one ounce; Pouder of Muſtard-ſeeds ſix drams; Cinamon, Cloves, of each half a dram; volatil Salt of Amber a dram; diſtill'd Oils of Mint and of Mace, of each eight drops. With a ſufficient quantity of the Confection Alkermes, or the brodium of Ginger make an Electuary.

Take of Conſerve of Roſemary-flowers, Conſerve of Sage-flowers, of each half an ounce, Confection Alkermes two drams; Pouder of Caſtor, the Pouder of *Diambra* and *Diamoſchus dulcis*, of each a ſcruple; Cinnabar of Antimony, diſtill'd Oil of Amber, of each half a dram. With Syrup of Clove Gilly-flowers make an Electuary.

Take of the Pouders *Diambra* and *Diamoſchus dulcis*, of each a dram; prepar'd Pearls, prepar'd red Coral, of each a ſcruple; prepar'd white Amber four ſcruples; Confection Alkermes two drams; extract of the Roots of Elecampane two ſcruples; extract of Orris half a dram; extract of Aromatic Calamus a ſcruple; Extract of Piony, and of the wood Aloe, of each half a ſcruple; the diſtill'd Oils of Sage, Roſemary and Amber, of each ſixteen drops; diſtill'd Oil of Lavender twenty drops; the diſtill'd Oils of Spike, Aniſeeds, Fennel, Mace and Nutmegs, of each twelve drops; dill'd Oils of Cubebs and Cloves, of each eight drops; diſtill'd Oil of Rue ſix drops; fine Sugar ſeven ounces. Mix, *&c.* This was *Kolbius*'s Mixture, ſo much celebrated for its Vertue againſt Apoplexies: But it may be rendred more effectual by adding Rocket-ſeeds, and Muſtards-ſeeds.

All theſe Preſcriptions are proper to be us'd both in and after the Paroxyſm. Now in purſuance of the preſerving Cure, let us view the evacuating Medicines fit to be given after or before the Paroxyſm. Among which, Vomits obtain the Precedency, as *Mercurius Vitæ*. Or,

Take of *Mynſichtius* his Emetick Tartar two grains; Sal-armonic nine grains. Make a Pouder. Or,

Take of Tartar vitriolated ſix grains; *Mynſichtius*'s Emetic Tarta two grains; Scammony ſulphurated one grain.

Purgative Medicines are next in order. As,

Take

Take of *Crato*'s Pills of Amber, Extract of Wormwood, of each half a ſcruple; Extract of Troches Alhandal, one grain; diſtill'd Oil of Amber, two drops. With Eſſence of Primroſes make Pills.

Take of ſweet Mercury, a ſcruple; Scammony ſulphurated, five grains. With Conſerve of Clove-gillyflowers make a Bolus.

Take of *Ruffus* his Pills *de tribus*, half a ſcruple; Extract of black Hellebor, five grains; Tartar vitriolated, three grains. With diſtill'd Oil of Caraways make Pills.

Take of Gum-ammoniac diſſolv'd in Vinegar, Bdellium diſſolv'd in Vinegar, of each half a dram; Vitriol of Steel calcinated till it become white, a ſcruple; Magiſtery of the Gum of *Peru*, fifteen grains; Scammony prepar'd according to *Brendelius*'s Method, a ſcruple; Extract of Troches Alhandal, ſix grains: make a Maſs for Pills, fifteen of which are one Doſe.

The Decoction of ſudorific Woods are very proper in the declination of the Paroxyſm, and ought to be continued for ſome time.

If theſe and ſuch like Remedies do not accompliſh the Cure, we muſt have recourſe to Setums, Cupping-glaſſes, Iſſues, *&c.* If the Perſon be of a catarrhous Conſtitution, an Iſſue in the Pit of the Neck is very proper. But theſe external Helps are of no uſe in poſitive Apoplexies; in the privative indeed, where the Blood or Lymph is faulty, they frequently afford relief.

The Plaiſter *de Ranis*, with Mercury, mix'd with Balſam of *Peru* diſſolv'd with the Yelk of an Egg, may be applied to the Head with good ſucceſs. When the Diſeaſe declines, a Salivation perhaps may not be improper.

ART. II.

Of particular Apoplexies.

WHen an Apoplexy ſeizes a particular Part, 'tis call'd *Paraplegia*, and by moſt of Writers is referr'd to Palſies; but the frequent reciprocal Permutation of general *Apoplexies* and *Paraplegia's* vouch for their near alliance. Sometimes it is only a retainer to a univerſal *Apoplexy*, at other times it comes of it ſelf in the form of a principal Diſeaſe. It admits of three Degrees; 1. When the Senſe of the Part remains, and only its Motion is loſt. 2. When 'tis depriv'd both

both of Senſe and Motion; but retains its natural Heat. 3. When 'tis deſtitute of Senſe, Motion, and Heat, and becomes flaccid and ſoft.

Some aſſign the Obſtruction of the Nerves for its Cauſe, but Experience teaches us, that it may proceed by conſent from other Parts; from hyſteric Fits, Worms in the Guts, and the Paſſions of the Mind. The true cauſe ſeems to be the contraction of the nervous Parts about the Root of the Spinal Marrow, which interrupts the Intercourſe of the Spirits to the Part affected, perhaps by the conſent of the Nerves; as the Stone in the Kidneys is wont to ſtupifie the Leg of the reſpective ſide.

It undergoes a frequent Permutation into Convulſions and Palſies. The manner of its ſucceſſion to privative *Apoplexies* is accounted for above. It ſucceeds likewiſe to poſitive *Apoplexies*, and in that caſe ſeems to be tinctur'd with a convulſive Quality.

The Method of Cure is the ſame, as that of an univerſal *Apoplexy*. Vomits are always proper, eſpecially if it follow an univerſal *Apoplexy*. As,

Take of *Mercurius Vitæ*, two grains; Scammony ſulphurated, three grains: with Conſerve of Bugloſs-flowers make a Bolus.

If Vomiting be very uneaſie to the Patient, give a ſtrong Purge. As,

Take of Reſin of Jalap, half a ſcruple; diſſolve it with the Yelk of an Egg in Fumitory-water, ſix drams; Cinnamon-water, a dram. Mix.

When it follows privative *Apoplexies*, Blood-letting is proper; otherwiſe it ought to be avoided, except in the caſe of a Plæthora. Iſſues, bliſtering Plaiſters laid on the Pit of the Neck, and ſcarify'd Cupping-glaſſes applied between the Shoulders are likewiſe uſeful againſt this privative ſort.

Theſe general Remedies being premis'd, Sudorifics come next, as the volatil Salts and Spirits of human Skull, or human Blood, and all apoplectic or epileptic Specifics. The Decoction of Woods, with Juniper and Laurel-berries, and Roots of Elecampane, is very much us'd for this purpoſe. As,

Take of Saſſafras-wood, two ounces; Roſemary-leaves, a handful or two; freſh juicy Juniper-berries, or Laurel-berries, an ounce and a half, or two ounces; boil 'em in a *Balneum Mariæ* in Wine and Water, of each a pound and a half with an Alembic. Mix the ſtrain'd Decoction and the diſtill'd Liquor, and add of Spirit of Juniper-berries, four ounces;

Spi-

Spirit of Sal-armoniac, three or four drams; Syrup of Clove-gillyflowers, three ounces. Mix, and give a large Draught thrice a Day.

Poterius's Diaphoretic Gold is admirably fitted for this Case. He either prepar'd it of Gold calcined by Amalgamation; or, mix'd *Aurum fulminans* with a double quantity of Flowers of Sulphur, and reduc'd it to a Pouder of a purple colour, by putting red hot Coals into the Crucible; then digest it for fifteen Days in rectify'd Spirit of Wine impregnated with Aniseeds; and afterwards separated the Spirit either by distillation or deflagration, and reserv'd the Pouder for use. 'Tis not fit to be given in a liquid form, for that its sinks to the bottom: but thus;

Take of Conserve of Clove-gillyflowers, a dram; diaphoretic Gold, from fifteen grains to a scruple. Make a Bolus for two Doses. Or,

Take of human Skull prepar'd without Fire, prepar'd Unicorn's Horn, of each twelve grains; fulminatory Gold, four Grains; volatil Salt of Vipers, six grains. Mix.

After the first Dose of these Pouders, the Person may take a spoonful or two of Spirit of Triacle, and then make account to sweat. Cinnabar of Antimony is likewise a noble Sudorific. As,

Take of Cinnabar of Antimony, fifteen grains; Amber, half a scruple; volatil Salt of Amber, five grains: make a Pouder. Or,

Take of prepar'd human Skull, prepar'd red Coral, Cinnabar of Antimony, of each half a scruple; distill'd Oils of Cinnamon and of Cloves, of each a drop. Make a Pouder to be taken in a convenient Vehicle. Or,

Take of black Cherry-water, Lilly-convally-water, Mint-water, of each an ounce; Spirit of black Cherries, six drams; Cinnabar of Antimony, half a dram; volatil Salt of Harts-horn, fifteen grains; Syrup of Clove-gillyflowers an ounce. Mix.

For an Apoplexy of the Hands, foment the Pit of the Neck with distill'd Oils and spirituous Waters. If the Feet be affected, apply them to the Loins and neighbouring Parts. But fat expres'd Oils must be avoided.

Take of Mustard-seeds, one part; Juniper-berries, two parts; bruise and infuse them in Spirit of Wine, which reserve for fomenting the Parts last mention'd.

Take of Spirit of Wine camphoris'd, or Spirit of Ants, three ounces; Spirit of Earth-worms, an ounce and a half;

Essence

Eſſence of Caſtor, ſix drams; Spirit of Sal-armoniac with Quick-lime, three drams: mix and bathe the Back-bone immediatly after ſweating, applying afterwards a warm Cloth fumigated with Gum-armoniac, or rubbing it with diſtill'd Oils mix'd with Oil of Tartar, or ſome of the Oils of the fat and hard Parts of Animals, ſtripp'd of their nauſeous ſtink by frequent Cohobation upon their *Caput Mortuum*. If they are of themſelves too ſharp, or apt to draw Bliſters, qualifie 'em with the Oil of Earth-worms by decoction.

If the Part affected be apt to wither and conſume; tho' the Root of the Evil be not ſeated in it, 'tis not improper to anoint it with the following Mixture, in order to provoke and waken the Spirits.

Take of Spirit of Earth-worms, three ounces; diſtill'd Oils of Spike, and of Juniper, of each a dram and a half; diſtill'd Oils of Lavender and Marjoram, of each half a dram; diſtill'd Oil of Amber, two ſcruples; plumous Allum, (which ought always to be added in this caſe) a ſcruple.

If this prove too ſharp, as it frequently does to ſcorbutic Conſtitutions, take of Human or Gooſe Fat, three or four ounces; diſtill'd Oil of Turpentin, three drams; Oil of Juniper-berries, two drams; Oil of Spike, half a dram. Mix, and uſe as above.

Let the following Plaiſter be likewiſe applied to the Back-bone, *viz.*

Take of Gum Galbanum, two parts; Gum Caran, one part; ſoften 'em with Stone Oil into the Conſiſtence of a Plaiſter.

Bathing in a Decoction of Ants is of ſingular Virtue both in this and many other caſes; of which more elſe-where.

ART. III.

Of a Palſie.

A Palſie ought to be carefully diſtinguiſh'd from a ſtupidity of any Part, and particular Apoplexies, tho' it be near ally'd to both. The former retains the Power of Moving, tho' depriv'd of the Senſe of Feeling; the latter relates to the Diſorders of the Nerves: whereas a Palſie is principally a Relation of the Tendons, Fibres and Ligaments by which the Part is moved, the Nerves being only ſecondarily affected. So a true formal Palſie affects chiefly the moving Faculty, and if the Nerves are not much touch'd the Senſe of

Feel-

Feeling remains. Now by this it appears, that in many Cases a Palsie is accus'd, where particular Apoplexies are the true Criminals. Their difference is thus made out, 1. The particular Apoplexies are Retainers to the Disorders of the Brain and spinal Marrow; whereas Palsies follow another set of Diseases, as the Scurvy, Hypochondriac and Colic Fits, and excessive Drinking. 2. In the former the original and uppermost part of the Nerves is chiefly affected, and upon that account external Remedies are applied to the Neck and Back-bone, without regard to the apoplectic Part. But in the latter, that part of the Nerve which accompanies the Muscles of the place, is principally injur'd, and accordingly external Applications are confin'd to that quarter. 3. The former deprives both of Sense and Motion; the latter oftentimes retains the Sense, and is molested with Pains. 4. The former are constant and obstinat; the latter relents now and then, and 'tis not quite so hard a matter to compass its Cure.

Some Palsies are call'd Privative, when the Passages for the Spirits are straiten'd and embaras'd, by Obstructions or Compressions of the Nerves, the sudden retreat of the small Pox, Wounds, Falls, and such like external Causes. But these are more properly particular Apoplexies. A true positive Palsie may be occasion'd by a cold moist Air, bathing in cold Water, &c. Thus old Men and Children are as it were half paralytic; the former by reason of a watry Serum that succeeds in the room of their exhausted nutritious Juice, and unbends the Fibres; the latter by virtue of overflowing Moisture.

The usual internal Cause of a Palsie is an acid Humour convey'd along with the Lymph or Serum to the affected Part, where it vitiats the Fibres, and renders 'em unfit for their wonted Motions. Palsies of this kind are frequently occasion'd by immoderat drinking of some Wines that partake of a notable volatil Acid, which not being concocted in the Stomac, is thrown upon the external Parts, and creates in them sometimes a tickling sort of Pain, resembling the motion of Pismires; sometimes a stupid, and sometimes a tearing Pain: Thus the Fibres are corrupted, but the Nerves are at first secure; and accordingly the moving Faculty is extinguish'd, while that of Feeling remains intire, tho' in progress of time it may dwindle away.

A scorbutic Acid join'd to a serous Vehicle, frequently causes Palsies. It proceeds insensibly; at first causes a wan-

dring Stupidity and Titillation of the Fingers or Toes. One Day they are quite well, another Day mightily ſwell'd, and retain the Senſe of Feeling, tho' render'd in ſome meaſure ſtupid; and the Perſon when lying can move 'em; but if he attempt to ſtand, can perform no progreſſive Motion without a great deal of Pain. 'Tis a volatil auſtere Acid that gives riſe to theſe Symptoms; and if Auſterity prevail, Convulſions and Contractions invade the Part.

The French Pox, Worms in the Guts, and Suffocations of the Matrix may procure Palſies: But the Bilious Colic, that proceeds from thin ſharp Humours, more frequently introduces 'em. If theſe Colic Pains be exaſperated by violent Purgation, or otherwiſe, as it frequently happens, the Navel being drawn inwards, and the Belly very much bound and grip'd, there follows a Stupidity, and afterwards a paralytic Diſpoſition of ſome Members of the Body. In this caſe the Cauſe ſeems to be a ſcorbutic Acid lodg'd in the nervous Knot of the Meſentery, which contracts the Nerves, and ſo prevents the regular diſtribution of the Spirits to theſe Parts: So that partly by the mutual conſent of Membrans, and partly by the Tranſlation of the morbific Matter to the external Parts, ſuch Palſies take their riſe. The ſuppreſſion of wonted Evacuations of Blood, and the Paſſions of the Mind, eſpecially Grief and Want, are likewiſe apt to cauſe 'em.

Beſides theſe internal Cauſes, there are ſeveral external Occaſions of Palſies; as the touching of the Cramp-fiſh, or ſome Indian Shell-fiſhes, reported to be indow'd with a numming Virtue; the approaching to mercurial and mineral Fumes, and an indiſcreet tampering with Narcotics.

If the Nerves be chiefly affected, as in a total Privation of Feeling, or when the Diſeaſe proceeds from a Wound, Fall, or other external Accidents, or ſucceeds an Apoplexy, the Original of the Nerves muſt be chiefly regarded, according to the Method propos'd for particular Apoplexies. If the Senſe of Feeling be intire, or not much impair'd, the Ligaments and Tendons of the Part affected ought to be moſt taken care of. If a Palſie invade the Face, 'tis diſtinguiſh'd from a Dog-cramp by this, that in the former the paralytic Part is ſoft and flaccid, and eaſily reduc'd to its natural Poſture; but in the latter, the contracted Part is hard, and cannot be brought to join the others without Pain. As for the privative Palſies that approach to the Nature of Apoplexies, or in which the Senſe of Feeling is quite loſt, or

the

the Evil inveterat and fix'd to a Part, their Cure will be very difficult: but if once cur'd, they are not ſo apt to relapſe, as the proper poſitive Palſies proceeding from internal Cauſes. If the heat of the part be quite extinguiſh'd, and Contractions ſeize it: If the Eye of the paralytick Side be leſſen'd: If the Perſon be old and of a Cacochymical or Cachectic Conſtitution: they are croſs Circumſtances. If a Trembling invade the Part: If a Looſeneſs ſucceed to a light Palſy; or an acute Feaver to the Apoplectic Sort: they are eſteem'd Signs of Recovery.

In regulating the method of Cure, we muſt heedfully diſtinguiſh the privative apoplectic Palſies from the poſitive ſort: If the former ariſe from external cauſes, the Cure turns upon their removal, and inunctions of the part with the Queen of *Hungary*'s Water, Rock Oil, the Oil of Juniper, Oil of Lavender, and above all Balſam of Peru. Internally nothing equals Oil of Lavender taken to the quantity of four or ſix drops in Bed, in order to ſweat; for which purpoſe diſtill'd Oil of Amber is likewiſe proper. If they proceed from internal cauſes, ſudorific and cephalick Medicines are us'd in the ſame manner as for particular Apoplexies; and in an inveterat caſe a Salivation is the laſt Refuge.

As for poſitive Palſies, the peccant matter muſt be corrected and diſcharg'd by aromatic and volatil Sudorifics, and the nervous Parts corroborated and reſtor'd to life by the external application of penetrating meagre Oils. In order to compaſs theſe ends, 'twill be needful to obſerve the following Rules.

1. Since the peccant matter is an Acid that owes its Original to the firſt Paſſages, Saline, Digeſtives, Vomits and ſharp Clyſters ought to be premis'd; and whatever purgative Medicines are us'd, they muſt be very gentle, eſpecially in the beginning. 2. A temperat milk Diet ought to be cloſely purſu'd; for that it vanquiſhes any Acid, and ſupplies the Nerves with a chyl-like Juice, capable to repair their loſs of moiſture, occaſioned by copious Sweats. 3. When a Palſie is caus'd by a Colic or Scurvy, by all means avoid ſtrong Purges, leſt Convulſions inſue. Soft Laxatives, in which black Hellebor is the chief Ingredient, may be ventur'd upon. Or Clyſters impregnated with carminative Oils may be frequently injected; but at firſt they muſt be gentle and ſoft, as thoſe of Milk and Turpentine, &c. and in the progreſs of the Diſeaſe if the Patient reap no benefit by them, you may add a ſmall Whet. 4. Fat viſcous

Oils are improper for external Uſe. Penetrating and ſpirituous Liniments are only convenient, and ought always to be us'd immediately after Sweating, while the Pores are yet open. Indeed if the Perſon be ſcorbutic, temperat things are beſt to begin with. And when the affected Part begins to wither, and the Perſon withal is of a choleric Conſtitution, 'tis adviſable to abſtain from applying theſe ſubtil volatil Remedies. But where a Palſie proceeds from a corruption of the Lymph, and the Part is ſwell'd up, they are very needful. 5. If the ſtopping of any wonted Evacuation of Blood give riſe to a Palſie, repeated Blood-letting is wont to finiſh the Cure.

I am now advanc'd to the Preſcriptions of proper Remedies. For Vomiting, the Flowers of Antimony, with Extract of Scammony, are recommended by *Hartman*. For Purging, ſweet Mercury is much applauded by *Sylvius*, and Turpentin by *Platerus*: Hellebor and Turbith are generally approv'd; but Coloquintida ought always to be added for a Whet.

Take of the arthritic Pills, a ſcruple; Scammony ſulphurated, four grains; Extract of Troches Alhandal, a grain: With the Eſſence of Sage make Pills. Or,

Take of the Herbs Germander and Groundpine, of each a handful; Flowers of Roſemary, of Primroſes, and of Sage, of each two little handfuls; Roots of Angelica, Maſterwort, and Florentin Orris, of each three drams; Roots of black Hellebor, a dram; pick'd Senna, ſix drams; Roots of common Spurge, half a dram; Cardamoms and Cubebs, of each three drams; Salt of Tartar, a dram and a half. Mix for a Bag to be infus'd in Wine.

Sudorific Decoctions of Guajacum, Burdoc, *&c.* are much in uſe: But *Willis* has remark'd, that thoſe whoſe Blood is ſtuff'd with a fix'd Salt, and not much diluted with inſipid Serum, are apt to be offended by Sweating.

The internal Specifics for this Diſeaſe are much the ſame as thoſe for Apoplexies and Epilepſies. The Decoction of Roſemary over a gentle Fire in *Balneum Mariæ*, mix'd with a little Eſſence of Caſtor, is a noble Medicine. A large Drought of it ought to be taken in the Morning with a faſting Stomach. Primroſes, French Lavender, diſtill'd Oils of Lavender and Amber are much approv'd. The Decoction of Elecampane is a ſovereign Remedy for Palſies ariſing from a Colic. Saſſafras and Guajacum are of excellent uſe, eſpecially the former; Roſemary and Juniper or Bay-berries ought always

always to be boil'd with 'em. *Poterius* found great benefit by the following Prescription.

Take of the Shavings of Sassafras-wood, an ounce; Bayberries, an ounce and a half; boil them in six pound of Wine to three pound, and reserve it for use.

Instead of the Decoctions of these Woods, Essences and Spirits may be prepar'd from 'em, that are of singular use. *Lindanus* recommends a Wood call'd *Pavana*, given to the quantity of two scruples in a spoonful of Spirit of Wine: It procures Vomiting, Purging and Sweating, without impairing the Strength of the Person. Millet-seeds are likewise very proper for procuring Sweat. The volatil Preparations of Tartar, are wonderfully extoll'd. Its volatil Salt or Spirit, drawn from the Dregs of Wine or stinking Oil of Tartar, or the Spirit of Tartar cohobated with tartaris'd Spirit of Urine, are very useful in Cholic, Hypochondriac, and scorbutic Palsies. *Sylvius* was wont to cure cholic Palsies with his *Sal volatile Oleosum*. Next are the Spirit and volatil Salt of Urine prepar'd by putrefaction, Spirit of Salarmoniac, Spirit of Lavender, the Spirit and volatil Salt of Vipers, Spirit of Hartshorn succinated, volatil Salt of Amber, given along with Cinnabar of Antimony, and Magistery of Pearls: But above all, the volatil Preparations from Worms and Ants, have merited the greatest Approbation. If you digest a vegetable Spirit with Ants for some time, you'll have an incomparable Medicine that may be us'd both internally and externally.

But withal we are to remember, that these volatil Remedies are not fit to be given upon the first invasion of the Disease, till the Acid in the first Passages be in a good measure vanquish'd. Upon which account the fix'd Absorbents ought to lead the Van. As,

Take of prepar'd human Bones, from a scruple to half a dram; Cinnabar of Antimony, from twelve to twenty grains; volatil Salt of Amber, from ten to twelve grains. Make a Pouder for two Doses. Now after a discreet use of such like fix'd Medicines, 'twill be time to exhibit the volatil Sudorifics.

Poterius's diaphoretic Gold is a noted Specific. Six grains may be given for a Dose. *Helmont* commends the volatil Tincture of Coral. I have seen an admirable Tincture made with volatil Spirit of Tartar in his Majesty of *Great Britain*'s Laboratory; but Mr. *Febure* conceal'd the Way of Preparation.

If a poſitive Palſie proceed from the Relaxation, or prevailing Moiſture of any Part, 'tis convenient to anoint both the Part it ſelf, and the Back-bone, with the following Liniment:

Take of Human and Gooſe Fat, of each an ounce; Oil of Earth, three drams. Mix. Tacamahac and Balſam of *Peru* are fit for the ſame uſe. The Plaiſter for the Nerves of Tacamahac and Galbanum ſoften'd in diſtill'd Oil of Amber and Oil of Bricks may be applied to the Joints. If the Ligaments are much unbended and flat, apply *Crollius*'s ſtyptic Plaiſter ſoften'd with Oil of Bricks and Oil of Earth, and in the mean while endeavour to procure Sweat, by giving *Venice* Triacle inwardly. *Barbette* recommends the following Plaiſter:

Take of Gum Caran, half an ounce; Galbanum, an ounce; Oil of Euphorbium, a dram and a half. Make a Plaiſter.

If the Diſeaſe proceed from mercurial Fumes, exhibit the Decoction of Elecampane and Fennel; and after the Mercury is thrown out by ſweating, let the Patient drink Whey or Milk.

In a ſcorbutic light Palſie, the urinous volatil Medicines, and Milk are proper. The Decoction of Pine-Apple is likewiſe much commended. Or,

Take of the Tendrels of Fir, an ounce and a half; China-roots, an ounce; cut them ſmall, and boil them in Ale and Water till the half be conſum'd. Give a Draught of the ſtrain'd Liquor twice a Day. Theſe Ingredients may be alſo boil'd in Milk.

The Decoction of Betony with Juniper-berries; or an Eſſence prepar'd from the Rob of Pine-apples with ſome antiſcorbutic Spirit, and mix'd with Caſtor, are very proper. After a regular uſe of fix'd Abſorbents and volatil Medicines, Milk or Whey mix'd with Antiſcorbutics is a ſovereign Remedy; but it ought always to follow theſe Premiſſes. Iſſues and Setums are not improper in this Caſe.

If a Palſie proceed from the Colic, the Belly muſt be chiefly taken care of; Lenitive Clyſters of Turpentin and Milk frequently injected: and ſtrong Purgatives carefully avoided. The Decoction of Elecampane, of Millet-ſeeds and the four hot Seeds, and Saſſafras, are proper Sudorifics. Whey mix'd with Antiſcorbutics is much eſteem'd. Let the Navel and Part affected be fomented with Spirit of Tartar or of Sal-armoniac, and anointed thrice a Day with *Paracelſus* his *Galbanetum*.

So

So much for the internal Cure of Palsies. It remains now to consider the external Forms. If the Disease be inveterat, and the Part begin to wither, temperat fat Oils are proper. If the sense of Feeling be not much impair'd, and the power of Moving not lost, the strong apoplectic Waters, or rectify'd Spirit of Wine, in which the Ponders of Mustard-seeds, Pepper, Rue-seeds, Nettle-seeds, Aron-roots, and Pillitory of *Spain*, have been infus'd and digested, are fit for external Fomentation. Or,

Take of fresh Tobacco-leaves, a handful or two; Leaves of Origanum, Flowers of Elder, of each a handful; Roots of Angelica, from an ounce or two ounces; Roots of Pellitory of *Spain*, Aron-roots, of each an ounce; Euphorbium, Castor and Myrrh, of each from half an ounce to six drams; white and black Pepper, of each three drams; Flowers of Arabian Stechas, of Lavender, and Lilly Convally, of each half an ounce; Rocket-seeds or Mustard-seeds, Seeds of Mountain-Siler, from six drams to an ounce and a half: cut and beat them small; and pour upon 'em of rectify'd Spirit of Wine two parts, of Spirit of Earth-worms one part: digest 'em in a *Balneum Mariæ*, and draw off the Spirit by distillation. With which foment the Parts immediatly after sweating. Or,

Take of the Herbs Rosemary, Sage, Marjoram or Lavender, of each a handful; Lavender-flowers, Lilly Convally-flowers, and Rosemary-flowers, of each two little handfuls; Juniper-berries, an ounce; Mustard-seeds, from half an ounce to an ounce; Castor, three drams; black Pepper, a dram and a half. Infuse them in Spirit of Wine, and after digestion reserve the strain'd Liquor for use as above. And if the Disease be accompany'd by scorbutic Pains, add to it some Spirit of Sal-armoniac prepar'd with Quick-lime. Or,

Take of *Aqua Articularis* for external use, two, three or four ounces; Spirit of Sal-armoniac with Quick-lime, from an ounce to two ounces; Spirit of Earth-worms prepar'd by putrefaction, half an ounce. Mix, and bathe the Part thrice a Day.

Take of Spirit of Wine camphoris'd, three ounces; Spirit of putrify'd Earth-worms, an ounce; Essence of Castor, six drams. Mix, and use as above.

In a Colic Palsie, rectify'd Spirit of Tartar mix'd or cohobated with Spirit of Wine tartaris'd, are externally us'd with great success. Balsam of *Peru* dissolv'd with the Yelk of an Egg, and mix'd with Essence of Amber extracted by rectify'd

Spirit of Wine, is much approv'd for external uſe in all ſorts of Palſies.

Take of common ſtinging Nettles, three handfuls; Chamomil, one handful; Cummin-ſeeds, a dram; Salt, three ounces: beat 'em well in a Mortar, and boil them in a ſufficient quantity of human Urine, till the fourth part be conſum'd. Bathe the Part Morning and Evening with this Decoction, and wrap it up in a Cloth dipp'd in the Liquor, and after three or four Days anoint it with Oil of Foxes. In apoplectic Palſies pricking with Nettles is a very ſucceſsful Remedy. Bathing in fermenting Wine, or ſuch as is reduc'd to a Fermentation by throwing Quick-lime into it, is of extraordinary uſe both againſt Palſies and Sciatica's; for by this means the volatil Tartar of the Wine inſinuats it ſelf into the Part. A Bag full of Ants thrown into boiling Water yields a Vapor, which if conveniently receiv'd upon the Part, is very ſerviceable; after the Bag has loſt its ſmell, it may be boil'd in Water for the Patient to bathe in.

Take of Brimſtone, and Bay-berries, of each half a pound; Roots of Gentian, three handfuls; Roots of Elecampane, and long Birth-wort, of each two handfuls: boil them in Quick-lime Water for an artificial Bath.

The laſt Refuge is the hot Baths: But if a Colic or uſe of Wine gave riſe to the Diſeaſe, or arthritic and gouty Pains accompany it, they are not proper. In a word, they are more convenient for a ſanguin or phlegmatic, than for a choleric Conſtitution.

Take of the Herbs Marjoram and Sage, of each a handful; Roſemary, two handfuls; Juniper-berries, four ounces; Bay-berries, two ounces; Roots of Pellitory of *Spain*, an ounce. Boil them in Water, and place the hot Decoction under the Perſon's Feet, that the Fumes may aſcend.

Take of Galbanum, half a pound; Oil of Turpentin, a pound and a half: diſtil the Oil from them, to which add an ounce of Oil of Lavender; and then repeat the diſtillation, which produces an excellent Balſam to be digeſted and circulated with rectify'd or tartaris'd Spirit of Wine. This may be applied to the Navel, Back, or Part affected, as occaſion requires.

Take of white Rock-Oil, two drams; diſtill'd Oil of Amber, half a dram; diſtill'd Oils of Lavender, Marjoram and Spike, of each a ſcruple: Mix, and anoint the affected Parts.

As

As for Plaisters, those of Tacamahac are most approv'd, especially when the Nerves are overcharg'd with Moisture. But if the Person be scorbutic, or the Part depriv'd of all manner of Sense, temperat oily things are best: As,

Take of Human or Goose Fat, of each three, four, or six ounces; distill'd Oil of Turpentin, three drams; Oil of Juniper-berries, a dram; Oil of Spike, half a dram. Mix, and anoint the Part.

Take a bowell'd Goose, and fill it with the Leaves of Sage, Rosemary, Spike, and Avens; to which add of the Fat of a wild Cat, an ounce and a half; Frankincense, Mastic and Amber, of each half an ounce; Castor and Euphorbium, of each two drams: Sow 'em in, and roast the Goose on a Spit; reserving the Fat that drops from it, as an admirable Liniment for paralytic Parts. Or,

Take a bowell'd Gander, and wash it well with Wine, then stuff its Belly with Frankincense, Myrrh, Mastic, of each two ounces; Ointment call'd *Martiatum*, six ounces. Roast it on a Spit; throw away the watry Phlegm that drops from it, and take of the Fat well separated, an ounce, and Pouder of Earth-worms, two ounces. Mix, and distil thro' a Retort an incomparable Oil for anointing paralytic Members.

These external Remedies are apply'd to the paralytic Members when the Ligaments and Tendons are faulty; but if the Source of the Distemper be lodg'd in the Nerve, then we apply 'em to the Back or Neck, or Crown of the Head, according to the Progress of the Nerve.

CHAP. IV.

Of the Deficiency of Rational Operations.

THE Intellect or Rational Faculty being immaterial, cannot be vitiated of it self by any morbific Cause; but for so much as 'tis conversant about the Objects of our internal Senses, it makes use of their Ministry; and if they are out of order, shares of the common Calamity. The internal Senses are the Imagination and Memory, which depend upon the regular Motion of the animal Spirits in the Brain, and run into disorder upon their Enormities, as appears *a posteriori* by ridiculous Gestures, Words and Actions. Thus whatever impairs the right use of Reason, must immediatly affect the Imagination and Memory.

Our

Our rational Faculty is injur'd either by being diminish'd or aboliſh'd, as by Stupidity and Folly; or by being perverted, as in Deliriums, &c.

ART. I.

Of the Defect of Memory, and Stupidity.

OUR Reaſon is impair'd or extinguiſh'd by the Deficiency of Memory, which is an Endowment common to us with Beaſts, and is generally affected by the Diſorders of the Head. The remote Cauſes that prejudice the Memory may be reduc'd to three Claſſes. 1. Whatever alters the regular Form of the Brain, its Pores and Paſſages; as Falls, Bruiſes, Wounds, or any preternatural Form of the Head. 2. Whatever corrupts the Blood and Animal Spirits; as immoderat Drinking, unſeaſonable Faſting, ſtopping of any wonted Evacuation of Blood, exceſſive Bleeding, &c. 3. Whatever exhauſts, diſperſes, or ſtupifies the Spirits; as an indiſcreet uſe of Opium, Poyſon, Love-Potions, exceſſive Venery, ſudden Fear, Care and Watchings, exceſs and multiplicity of Studies, ſleepy Diſeaſes, Epilepſies, Apoplexies, Madneſs, acute Fevers, the Plague, and old Age.

A natural want of Memory being incurable, does not fall within the compaſs of our preſent Inquiry. If it be preternaturally occaſion'd, we ought to conſider the Circumſtances and paſt Life of the Patient. If the Perſon be old, drouſie, and inclin'd to ſleep much, and voids a great deal of Phlegm by the Mouth and Noſtrils, but retains a vigorous Judgment, we will find that in his Youth he was not given to Study, nor perpex'd with Buſineſs and Care; and that the loſe of Memory proceeds from an inundation of Lymph in the Brain. For old Perſons whoſe Youth was imploy'd in much Study and Thought, have generally a dry Habit of Body; they void but little by the Mouth or Noſe, ſleep not much, and are eaſily wakened: and their want of Memory proceeds from the dryneſs of the Brain, and agility of the Spirits. If young Perſons are ſeiz'd with a loſs or deficiency of Memory, whoſe Apprehenſion and Genius was and continues lively, it argues a dryneſs occaſion'd in the Brain by the nimble Revolutions of the Spirits; and generally ſuch Perſons are in danger of loſing both Judgment and Memory when they grow old. And thoſe whoſe Memo-

Memory and Judgment are very fresh and keen in their Youth, are apt to run the same risque. If a Youth have a weak Memory, and withal a drousie inactive Temper, 'tis owing to the Humidity of the Brain, and Deficiency of Animal Spirits.

The sudden loss of Memory without any visible Cause, is a Forerunner of an Apoplexy, Palsie or Epilepsie. If it surprise one already enfeebled and weak, 'tis a sign of Death. If it arise from the moisture of the Brain, 'tis easier cured, than when it flows from an excessive dryness. If it be caus'd by Poison, Love-potions, inveterat Diseases of the Head, malignant and acute Feavers, 'tis almost incurable.

As for the Cure. The remote Causes must be specially accounted for: If it proceed from the dryness of the Brain, aromatic and spirituous Medicines are very noxious; nor are there any Medicines so effectual, as moist and juicy Food, Milk, Chocolate, &c. If it arise from the Moisture of the Brain, attended by a stupidity and drousiness of the Spirits, Purgatives are first proper, then Aromatics, sneezing Pouders, and Medicines to be chew'd.

The aromatic Medicines are Rosemary, Baum, Stechas, Spike, and all the Spices. Three Cubebs taken in the Morning with a fasting Stomac, corroborat the Memory wonderfully. Cardamoms are very good, but more proper for old than young Persons. Frankincense and Amber are likewise very useful. But above all, Ambergrease is the most powerful Medicine. 'Tis given in Pouder with Sugar, or by way of Essence or Tincture prepar'd with Spirits of Roses or Black Cherries. It ought to be given in a small Dose, by reason of a Stupidity that sometimes follows it. Where the Brain is dry, or the Patient young and of a hot Constitution, 'tis not proper. But for old People 'tis incomparable, if discreetly us'd. Besides, 'tis an incentive to Venery, which is a mortal Enemy to the Memory.

Lauremburgius recommends the four following Compositions for corroborating the Memory, which are chiefly to be us'd when the Brain is moist, and the Spirits drousie.

Take of juicy Tobacco-leaves two handfuls; Roots of Pellitory of *Spain* three drams; Ginger a dram. With Honey reduce them to the consistence of a Pultice, and make little round Balls to be chew'd or roll'd to and again in the Mouth.

Take of the Herbs, Baum, Marjoram, Sage and Rosemary, Bay-leaves, of each a handful; Flowers of Lavender, Lilly Convally,

Convally, Lime-tree, and French Lavender, of each a little handful. Boil them in Spaniſh or Rheniſh Wine, and waſh the Head with the Decoction every fourth, fifth, or ſixth Day.

Take a convenient quantity of Spaniſh Wine, in which macerat for fourteen or fifteen days the following Ingredients: Take of the Herbs, Baſil, Marjoram, Sage, Baum and Penny Royal, of each a handful; Flowers of Borrage, Sage, Primroſes, Roſemary, French Lavender, and Lilly Convally, of each a little handful. Diſtil thro' an Alembic, and receive the Spirit in a large open Body, which ſet into an heap of large black Ants, ſuch as reſort to reſinous Trees. When four or five handfuls of Ants have crept into it, ſtir them with a ſtick till they be all ſtifled. Then ſet them to digeſt for fourteen days in the Sun, and after that draw off the Spirit, and infuſe into it the Confection of *Anacardium*, Cinnamom, of each an ounce; Saffron half a dram; Moſch twelve grains. Mix, digeſt and ſtrain out the Spirit; of which exhibit a ſpoonful in a Glaſs of Wine every Morning.

Take of Tobacco-leaves two handfuls; Flowers of Common Baſil, of Baum, of Primroſes, and of Marjoram, of each a handful. Bruiſe them, and mix with Oil of Olives and freſh Butter, of each three ounces; Rheniſh or Spaniſh Wine five ounces: boil for a Liniment, to be ſtrain'd and applied to the Temple and top of the Head.

Montagnana extoll'd the following Preſcription for a valuable *Arcanum*: Take of Cubebs, Calamint, Maſtic, Nutmegs and Cloves, of each a dram; Eaſtern Ambergreaſe half a dram; Moſch five grains. With Juice of Marjoram make Pills. Let the Patient take down a few at Night, and double the quantity next Morning.

Sebizius recommends the following Pills, *viz.* Take of Aloe, an ounce; Rhubarb, two drams; Myrrh, Saffron and Agaric, of each a dram; Gentian and Zedoary Roots, of each a ſcruple. With *Venice* Treacle make ſmall Pills. Doſe ſeven or nine.

Tea boil'd in Wine is a ſovereign Remedy for corroborating the Memory and Judgment. Or,

Take of the Cephalic Water for internal uſe, and *Aqua Sopherum*, of each two ounces; *Matthiolus*'s Quinteſſence half an ounce; Spirit of Black Cherries, Spirit of Lilly Convally, Spirit of Primroſes, and Eſſence of Amber, of each a dram; Syrup of Betony an ounce: Mix for internal Uſe. Or,

Take

Take of Conserves of Rosemary-flowers, of Sage-flowers, and of Clove Gilly-flowers, of each half an ounce; candy'd Nutmegs, three drams; of the Pouders *Diambra* and *Diamoschus Dulcis*, and Sprit of Lilly Convally, of each a dram and a half. With a sufficient Quantity of Syrup of Clove Gilly-flowers make an Electuary. Or,

Take six fat Figs; Rocket-seeds, six drams; Bastard Saffron, a scruple. With Syrup of Clove Gilly-flowers make an Electuary: of which take every Morning the bigness of a Walnut; using after Dinner Spirit of Hartshorn, or Spirit of Sal-armoniac, succinated.

Silver dissolv'd in Spirit of Sal-armoniac is likewise commended.

As for external Applications. Let Oil of Myrrh *per deliquium* be applied to the Temples and hinder-part of the Head. When the Head is oppress'd with cold Humours, let the Sutures call'd *Coronalis* and *Sagittalis*, be fomented with Spirit of Wine, in which Pepper is infus'd. In the like Case *Hildesheim* recommends the following Essence, *viz.*

Take of the Leaves of Betony, of Sage, of Lavender, of Rosemary, and Flowers of red Roses, of each a handful; Nutmegs, long Pepper, Galangal, and round rooted Cyperus, of each four scruples; Castor, two drams; Nutmegs, half an ounce; Myrrh and Frankincense, of each three ounces; Saffron, half a dram or two scruples. Infuse them in Spirit of Wine; then digest and strain it for anointing the Nostrils, Temples, and Crown of the Head.

ART. II.

Of Deliriums *in general.*

THE Depravation of the Rational Faculty is call'd a *Delirium* or Doating, which sometimes seizes the Apprehension alone, and at other times reaches to all the three Operations of the Intellect together. The immediat Cause is the Disorder of the Animal Spirits, in respect of their Substance and Motion; which occasions various *Deliriums* according to the Humour and Constitution of the Patient; just as one and the same Wine fills one Man with Anger and Fury, a second with Mirth and Jollity, and inspires a third with Love.

The remote Causes are either external, as narcotic Vegetables, poisonous or mad Animals, &c. of which more anon:

Or

or internal, as Fevers, Melancholy, &c. These internal Causes determin the Animal Spirits to such and such particular Motions, after the same manner as the Titillation of the Genital Liquor occasions particular Dreams and noctural Pollutions.

ART. III.

Of Deliriums *arising from Internal Causes.*

WHen a violent Fever attends a *Delirium*, 'tis call'd a Phrensie; or if the *Delirium* be not very high, a *Paraphrenitis*. If it be quite free from a Fever, we call it a melancholic Madness.

Of Phrensies.

THe immediat Cause is the confus'd and rapid Motion of the Spirits in the Brain, especially in the *Corpus Callosum*. The remote Causes are either the Heat and Effervescency, or the Stagnation of the Blood in the Brain. In the beginning of burning Fevers; the former occasions the Agility and Perturbation of the Spirits; and consequently the Watchings and light *Deliriums* that then molest the Patient. (If these Symptoms happen without a notorious Effervescency, 'tis a fatal sign of Maligaity.) The latter inflames the Membrans and cortical Part, and so causes a Phrensie, properly so call'd. This Inflammation is made to appear by dissecting phrenetic Persons after death; and is justly suspected when Pleurisies and Inflammations of the Lungs or any external Inflammations disappear of a sudden, and are succeeded by Phrensies.

The remote Causes are excessive Heat, drinking of spirituous Liquors, suppression of any usual Evacuation of Blood, or of a virulent Gonorrhy, Anger, and the exalted Passions of the Mind.

It ought to be remark'd, that tho' all Phrensies are attended with Fevers, they do not always proceed from the Fever, as in malignant Fevers, where the Blood does not boil high. Sportive ridiculous Phrensies ought to be carefully distinguish'd from those of a serious, angry, and eager Character. According to *Hippocrates*, the former are of a more benign Stamp than the latter.

As

As for the Symptoms. An actual *Delirium* is eaſily perceiv'd. An imminent *Delirium* is diſcover'd by a ſudden alteration of the Patient's Humour, a bold, fierce way of talking much, unquietneſs and toſſing in Bed; the nauſeous repetition of one thing, or forgetfulneſs of what was ſaid or done; obſtinat Watching, or the interruption and uneaſineſs of ſleep. When the *Delirium* has actually ſeiz'd upon 'em, they become moroſe and furious, leap out of Bed, and talk ſtrangely; the Urine is at firſt thick, and in a little time after grows thin and tranſparent; the Head feels hot; the Eyes look glittering, fiery, and very moveable. (If they appear ſtiff and ſtaring, 'tis an infallible ſign of a furious Phrenſie.) If in the beginning of an acute Diſeaſe, the Perſon complain of a Pain of the Eye-balls, or an Inflammation of the Eyes, or be apt to imagin ſtrange Colors, 'tis a fatal Preſage of Doating and Convulſions.

A proper Phrenſie which proceeds from the Inflammation of the Membrans of the Brain, is foreſeen from the violent beating of the Arteries in the Neck and Temples. It is attended by an unſufferable Pain of the hinder part of the Head; a difficult Reſpiration; an invincible Heat, and continual Fever free from the ſenſe of Thirſt; a proneneſs to rub and toſs the Head, and pull up the Hairs. When the Inflammation relents, it tends to a Gangrene, which occaſions Convulſions, Lethargies, and a total Inactivity.

A true Phrenſie proceeding from the Inflammation of the Brain, is very dangerous. If it increaſe after ſleeping; if it be ſerious and fierce; if a clammy cold Sweat drop from the Head, while the Body is unconcern'd; if it be attended by a difficult Reſpiration, immoderat Watching, Head-aches, notable Weakneſs, a ghaſtly Countenance, an invincible Forgetfulneſs, a Hiccough, gnaſhing of the Teeth, trembling of the Tongue and Hands, and involuntary voiding of Excrements; if the Perſon be ſpeechleſs, apt to gather up or pick the Bed-cloaths, or become lethargic; if the Noſtrils drop, and the Urine be not tinctur'd: All theſe Symptoms portend Death. A *Paraphrenitis*, proceeding only from the Heat and Effervescency of the Blood and Spirits, is more tolerable.

A Symptomatical Phrenſie is a proper Subject of Cure; but a Critical one ought not to be meddled with. It is follow'd for the moſt part by bleeding at the Noſe, and is diſtinguiſh'd by the following Symptoms. The Urine affords ſigns of Concoction; the Pulſe is unequal, but ſtrong and large; the Eyes ſparkle, a murmuring Noiſe diſturbs the

the Ears, the Noſtrils itch, the Face is red, and the lower Belly ſoftly diſtended. Sometimes 'tis uſher'd in by a ſudden Head-ach; or the ſick Perſon is young and apt to bleed at the Noſe. If theſe Symptoms are abſent, the Phrenſie is ſymptomatical, and ought to be cur'd by allaying the Heat and Turgency of the Blood and Spirits, or removing the Stagnation.

In the firſt place let the Phyſician take care, that he be not impos'd upon by drunken Perſons, whoſe Phrenſies reſemble thoſe of Fevers. In the next place, if the phrenetic Perſon be moleſted with Head-aches and immoderat Watchings, Narcotic Medicines are very proper, but ought to be cautiouſly adminiſtred, for fear of exalting the Phrenſie, or converting it into a Lethargy. In order to avoid ſuch Conſequences, let us take notice of the following Cautions, 1. That in acute hot Diſeaſes, Opiats ought to be prepar'd with Vinegar. 2. That they ought not to be adminiſtred in the beginning or heighth of the Diſtemper, but only during its increaſe. 3. That when the Perſon is very weak, they ſhould be omitted. 4. They ought ſtill to be mix'd with Bezoardic, Diaphoretic Pouders.

Blood-letting is always convenient; unleſs the Fever be very malign; and ought to be liberally perform'd, and in the following manner. 1. Let a Vein in the Hams be firſt open'd; then in the Arm; and afterwards in the Forehead. In caſe of a particular Suppreſſion of Blood in the lower Region, let the Vein in the Ancle be firſt open'd. Inſtead of breathing the Vein in the Forehead, ſome recommend the Application of ſcarify'd Cupping-glaſſes to the forepart of the Head. 2. Let the Surgeon, while the Vein is open, lay his Hand upon the Patient's Head, and mind the beating of the Artery, in order to adjuſt the quantity of Blood to be drawn forth, and the ſtrength of the Patient. 3. Let the Orifice of the Vein be ſtopp'd and open'd by turns by the Surgeon's Finger. Thus the ſtagnating Blood is evacuated without impairing the ſtrength of the Patient in ſo great a meaſure as otherwiſe.

As for external Applications, all ſtrong ſmelling things, except Camphyr, ought to be avoided; Vinegar muſt be added, but in ſmall quantities, becauſe its ſharpneſs hinders ſleep.

A ſymptomatical Phrenſie diſappears upon the removal of the principal Diſeaſe. Cooling and Narcotic Medicines are its proper Cure; to which Diaphoretic Febrifuga's are join'd

join'd according to the Degree and Circumstances of the Fever.

The acid Mineral Spirits of Vitriol, Salt, Sulphur, dulcify'd Spirit of Nitre, and dulcify'd Spirit of Salt, are very useful against Phrensies. Camphyr has a peculiar pacific Virtue. If it be added to Opiats, their Dose ought to be proportionably lessen'd: As,

Take of the Conserve of red Poppy-flowers vitriolated, half a dram; *Langelot's Laudanum Opiatum*, one grain; Camphyr, two grains. Mix, &c.

Sugar of Lead prepar'd with Spirit of Nitre is a powerful Pacific. The Decoction of the Flowers of Male Pimpernel in Water, whetted with a little Rhenish-wine, is of excellent use.

Take of the four great Cold-seeds, of each a dram and a half; white Poppy-seeds, three drams. With Purslain-water make an Emulsion. To which add human Skull prepar'd without Fire, half a dram; Bezoar Mineral, a scruple; Syrup of Purslain, half an ounce. Mix for use.

In a malignant Phrensie let the following Pouder be exhibited, *viz.*

Take of Cinnabar of Antimony, twelve or fifteen grains; Lunar Bezoar, six or eight grains; *Laudanum Opiatum*, a grain; Camphyr, two grains. Make a Pouder for two Doses to be exhibited in the Emulsion of white Poppy-seeds made with Pimpernel and Purslain-water. Or,

Take of the Cephalic Specific Pouder, a scruple; Sugar of Lead, six grains; Camphyr, two grains; *Laudanum Opiatum*, a grain and a half.

Acid Juleps are likewise very proper; and if the Belly be constipated, Tamarinds may be boil'd in 'em.

Externally let Cataplasms of Rue, Chamomile, Vervain, Briony-roots and Soap; or of Radishes, Salt, sharp Vinegar and Yest, be applied to the Soles of the Feet. Or,

Take of the Juice of Houseleek new drawn, six drams; sharp Wine Vinegar, an ounce and a half; Nitre, two drams; Camphyr, half a dram. Mix, and apply to the Stones, Soles of the Feet, and Fore-part of the Head. When the Person sleeps, it ought to be taken off the Head.

A Cataplasm of Houseleek, Purslain and Roses, may be applied to the Temples and Forehead. The Pulp of a Gourd applied to the Head shav'd is commended by *Bartholet.* Some set their Feet into an excavated Gourd, and find benefit by it.

The Juice of live River-crabs newly express'd is applied to the Forehead with wonderful success. Or,

Take of Roſe-water, ten ounces; Opium, a dram; Saffron, half a ſcruple. Mix them, and apply with a doubled Linnen Cloth to the Forehead.

Take of the Water of Frogs-ſpawn, ſix or eight ounces; freſh Juice of River-crabs, two, three or four ounces; Opium diſſolv'd in Vinegar, half a dram or two ſcruples; Camphyr and Saffron, of each ſix, eight or ten grains. Mix, &c.

Take of the Juice of River-crabs, extracted with the Water of Frogs-ſpawn, ſix ounces; Vinegar of Roſes, two ounces; Triacle of *Andromachus*, two drams; Camphyr, half a ſcruple; Saffron, ſix grains. Mix, and foment the Head and Temples. Let the Liquor be lukewarm or ſomewhat cold.

Lindanus attributes much to the ancient Way of applying live Creatures, cut up along the middle, as a Dove, a Cock, &c. to the Head ſhav'd: But in the firſt beginning of a Phrenſie they rather enforce it.

Oft-times the phrentic Perſons, thro' inadvertency, neglect to void their Urine; in which caſe, Take of Pellitory of the Wall, two handfuls; of Parſley, (the whole Herb) one handful. Boil them in Water. Bruiſe them into a Pulp, and with two ounces of Oil of Scorpions make a Cataplaſm to be applied to the Pubes.

Or, Let the Pubes and Perinæum be fomented; and then anointed with the following Liniment, *viz.* Take of Cony-Fat, or Ointment of Marſh-mallows, an ounce; Oil of Scorpions, half an ounce. Mix, &c.

Of Melancolic Deliriums.

THe Doatings of Melancoly are free from a Fever. They ought to be heedfully diſtinguiſh'd from the Melancoly it ſelf, which is a principal Diſeaſe ariſing from internal Cauſes, attended by a ſorrowful, ſullen, peeviſh, penſive Humour, an unaccountable Straitneſs and Anxiety of the Breaſt, a proneneſs to Anger, and a facility of being frighted: Whereas thoſe are for the moſt part occaſion'd by external Cauſes. The Epithet of Melancolic is join'd to them, not as if Melancoly and Grief were inſeparable Companions, for ſome are merry and ſportive; but becauſe they proceed from a vicious fix'd acid Humour, which the Ancients call'd Melancoly.

All Perſons ſeiz'd with this ſort of Doating, have peculiar Symptoms and Humours, according to the variety of their Objects, and the manner in which they are carried out in purſuit of 'em. But in general they all jump in the following Particulars.

1. The

1. The Mind and Thought are always confin'd to one Object, or one Sett of Objects. 2. Fear and Anxiety still haunt them: tho' they imagin themselves rich, Monarchs, &c. and seem to be tickl'd with the Fancy; yet still the Joy is but short-liv'd, and Fear, Vexation and Trouble fill its room. 3. They all sleep little or none at all; or if they happen to sleep, are still haunted with fearful Dreams, and scaring Phantasms. 4. All of 'em have their lucid Intervals. 5. The Disease is more apt to disappear or remit upon sudden alteration of Diet, or any other such occasional Cause, than by all the force and application of Art. 6. The Source of the Disease is always seated in the lower Belly. Upon which account Vomiting is the most sovereign Remedy. 7. The Cure never succeeds without abating the immoderat Watchings. 8. Foolish *Deliriums* are oft-times cur'd by foolish Remedies, which serve only to rectifie the Fancy; as a Man imagining Serpents to be in his Belly, was cur'd by conveying Serpents into his Excrements, and giving him occasion to think that they were voided by himself. We may read a great many such Instances, in *Thonerus*, *Platerus*, *Forestus*, &c.

The Seat is referable only to the Imagination or Fancy, which receives the Idea's of Objects convey'd thro' the external Senses, and stamp'd upon the Spirits. Now if these Animal Spirits degenerat from their Incid temperat Quality, and perform uncouth, awkward Motions, the rational Soul must needs consequently entertain it self with suitable Idea's.

Tho' this kind of Delirium be different from Melancoly it self, yet it does not invade any but such as have a melancoly Disposition of the Blood and Spirits; which by the way is the true reason why it does not always follow, where its ordinary Causes take place.

Suppose we then, that a melancoly Person meets with an Object which is extreamly agreeable or disagreeble to him; and is forcibly stamp'd upon the Mind by the introduction of some violent Passion, Love, Grief, Fear, &c. as if a hypocondriac Person be molested with a murmuring Noise in the Guts, resembling the Croking of Frogs: This fills him with Fear and Amazement: It determins the Spirits to new Passages which they are unwilling to forsake: The Idea of the frightful Noise still haunts his Thoughts, till at length by the repeated and continu'd Rack, and inuring the Spirits that unwonted particular Motion of Thought, the rational Soul is brought into a habit of entertaining and dwelling upon that

Subject; and ſo the Perſon is inſenſibly wrought into the fix'd Opinion, that Frogs are lodg'd in his Belly. Now that the Spirits being forcibly driven into new Channels are apt to perſiſt in the ſame courſe, and are unwilling to return to their wonted Devoirs, is evidently made out by the Influence of Paſſion, or any weighty Concern upon Watchings, or the Dreams of ſleeping Perſons, which is only owing to the pronenes of the Spirits to retain the ſame new Paſſages, as the preceding Buſineſs, and the Commotion it occaſion'd had ſo effectually cut out for 'em. The Verity of this Advance may be likewiſe evinc'd by the many Inſtances of Perſons liable to this Diſtemper.

The Doating that follows Melancoly being thus accounted for, our next Buſineſs is to offer the Cauſes of Melancoly it ſelf. They are either external or internal. The former are ſuch Objects as are apt to occaſion violent Paſſions, which immediatly diſorder the Spirits, and conſequently the Blood and firſt Digeſtion. The latter are ſuch Circumſtances of Diet and Way of Living as alter the Juices of the Body, which impart the reſpective Quality to the Blood and Spirits.

This Conſtitution of the Blood and Spirits is often-times natural and hereditary, ariſing from the Nature of the Seed; for ſo much as moſt of our Humours and Propenſity to particular Paſſions is owing to the natural Idio-ſincraſy of the Blood and Spirits.

All melancolic Diſpoſitions that have a tendency to Doating, owe their immediat Original to ſome vicious Fermentation or Digeſtion in the firſt Paſſages. The remote Cauſes may be ſometimes external, ſometimes internal; but they never reach the length of Doating, till they have ſtamp'd a vicious Character on the Abdomen and its Entrails. Some imagin a chymeric Melancoly proceeding eſſentially from the Head; but if they view the Matter throughly, they'l find cauſe to acknowledge their Error.

'Tis uſual to aſcribe Melancoly to the Spleen: And doubtleſs in melancolic Conſtitutions the Spleen may be damag'd by the Stagnation of the Blood in the Arteries, and may ſerve to exaſperat the Diſeaſe: it being a part enrich'd with good ſtore of Nerves, and communicating with the wandring and intercoſtal Pair, cannot well miſs of being prejudic'd by the membranous Convulſions that hypocondriac Perſons are ſubject to. But originally the Spleen is faultleſs, and the principal Cauſe muſt needs be a vicious Acid bred in the firſt Paſ-

Passages, that thickens the Blood, and destroys its due Fermentation. This is evinc'd both by the Symptoms and Method of Cure. The former are a voracious Appetite, a constipated Belly, and acid Belchings; the visible Effects of an Acid sculking in the Stomach or first Passages. As for the Cure, it turns upon absorbent anti-acid Medicines.

The Blood thus perverted by the prevailing Acid, stands accountable for the difficult Respiration, beating of the Heart, and the like Symptoms. It is not so productive of volatil lucid Spirits as otherwise; upon which account they become stiff and more fix'd, and consequently apt either to move irregularly in the Brain, or still to retain the same course of Motion. In the former Case the Doatings are wandring and undetermin'd. In the latter, the whole force and vigour of Thougt is confin'd to one Object, so that often-times the melancoly Persons are enabled to discourse and reason about it with much more accuracy than in their healthy state, when other Objects claim a larger share in their Thoughts, and cramp their Application to that one. Often-times the sick Person reasons calmly on any other Object beside that of his Melancoly, by reason that the Spirits are not not so keen and eager in pursuing the former.

The change of Air and Seasons, or of any *not natural thing*, sensibly alters the *Crasis* of the Blood and Spirits, and consequently the Nature of this *Delirium*, either by quite extinguishing, or heightning, or depressing it; or by removing it from one Object to another: As Wine by altering the state of the Blood and Spirits, first makes some Men cheerful, then inspires 'em with a talkative Humour; afterwards disposes 'em to Strife, Anger, Madness, *&c.* and last of all, covers 'em with Drousiness and Sleep.

Melancoly being grounded on the Constitution of the Blood and Spirits, becomes an inveterat Companion, and often-times propagates it self by an hereditary Succession, especially among Women, who convey the Legacy to their Daughters, that surely visits 'em when with Child, or upon point of Delivery, if not at other times.

It is often-times cur'd by the Stratagem of cheating the Patient into a contrary Humour or Passion; which if forcible and strong, recals the Spirits from the Passages in which they deviate.

'Tis highly necessary to obviat Melancoly betimes, before its Settlement. Now a melancolic Disposition is usher'd in by these Signs. The Person is troubled in sleep, and haunted

by aukward Dreams; he becomes ſullen and ſorrowful, and courts ſolitude; he is penſive, and apt to dwell long upon one thought; and is timorous to a high degree. If he begin to tell ridiculous Stories, and withal is full of his own Wiſdom, the *Delirium* is at hand.

Let the Cauſes be diligently inquir'd after. If it proceed from the Paſſions of the Mind, the Pulſe is low, inconſtant, contracted, often-times unequal, and ſometimes reſembles the Motion of Emmets or Worms; and when the Mind is unbended by chearfulneſs, *&c.* the Pulſe is proportionably alter'd.

If Melancholy ſteal on by degrees, without the influence of external Objects, and be follow'd by wandring unfix'd *Deliriums*, it proceeds from the hypocondriac Diſtemper; and is attended by the Palpitation of the Heart, Anxiety of the Breaſt, acid Belchings, a murmuring Noiſe in the Guts, conſtipation of the Belly, Wind, an uneaſie obſcure Pain in the left ſide of the *Abdomen*, with a Pulſation in the ſame place, or in the Back, a notable Heat in the Forehead, and wandring Inflammations over the Body.

If it proceed immediatly from the Depravation of the Blood, it remits now and then; the Patient is querulous and anxious, oppreſs'd with Grief and Sorrow, and a frequent Palpitation of the Heart.

If Melancoly be caus'd by Paſſions of the Mind, or external Objects, 'tis much more eaſily cur'd than when it owes its Original to the internal Indiſpoſition of the Blood and Spirits. If it be follow'd by Doting, recur frequently, or claim a hereditary Privilege, it accompanies the Perſon to the Grave. If it be occaſion'd by preceding Diſeaſes, as Fevers, Phrenſies, *&c.* a regular Diet carries it off. It is more uncommon among Women than among Men; yet the Cure of the former is more difficult, eſpecially if they be with Child, or paſs'd the ſeaſon of their Terms. If the Countenance be chearful: If the *Deliriums* begin to relent: If the Urine exchange its thin Conſiſtence for that which appears thick, muddy and black: If a Flux of the Emrods or Womb inſue: If a Scab and ſuch like Eruptions beſet the Skin; we hope a Recovery. If the Perſon be ſubject to uncouth Laughter or Crying, immoderat Grief attended by a ſort of Fury, it tends to a Palſie or Apoplexy, or Convulſions. If he obſtinatly decline eating or drinking, or totally deprive himſelf of Sleep, he poſts to the Grave.

We

We are now arriv'd at the Method of Cure, which consists in rectifying the Blood and Spirits by proper Correctives, and reducing the Animal to orderly Motions. The following Remarks are worthy our Observation upon this Matter.

1. The remote Cause must be taken off either by Moral Perswasions, or deceiving the Person with some cunning Stratagem, so as to bring him off the melancolic Fancy. If the Cause be internal, as suppression of the Terms, the hypocondriac Disease, &c. it must be particularly taken care of. In general the hypocondriac Specifics and comforting cephalic Medicines are always proper. 2. Vomiting is an essential part of the Cure, and ought to be frequently repeated. 3. Let the Physician be very cautious in visiting the Patients alone, for they hate the Person that pretends to cure 'em, and retain the Odium even after they are cur'd. 4. When the melancolic Fancy is deeply lodg'd within 'em, they ought to be undeceiv'd by the means of some Stratagem or Trick. 5. By all means the Belly must be kept open: If it do not answer every Day of it self, let Clysters or lenitive Draughts provoke it. 6. During the Solstices and Equinoxes, the Person ought to ply proper Preservatives, for fear of the Relapses which are wont to happen at those times. 7. Blood-letting is improper, excepting the Case of Suppressions, Inflammations and Plethora's, or where Madness is fear'd. *Willis* fancies, that when the old unactive Blood is drawn forth, it gives occasion to the Generation of new spirituous Blood; but he should have remembred, that 'tis Blood that begets Blood, and that by Blood-letting, Stupidity and dull Folly is promoted. Trepanations, Issues, and blistering Plaisters are sometimes us'd with success. 8. In the beginning of the Disease, Purgatives may succeed to Vomits: but in the progress of the Distemper they are very improper. Dieuretics are incomparable Medicines for this Disease. Melancolic People naturally void large quantities of Urine; and its deep tincture, muddiness or blackness, betokens the declension of the Distemper. 10. The *Hypochondria* must be particularly taken care of in all sorts of Melancolies. 11. By all means let Sleep be promoted by moist temperat Food, &c. 12. Opiats ought not to be exhibited alone, nor before the Acid in the Stomach be remov'd by the universal Evacuations. They ought to be mix'd with Specific and moistening Ingredients. Externally anodyn Fomentations for the Head, Washes for the Feet, &c. are very proper.

13. Their Diet muſt be very regular. Their Food nouriſhing, moiſt, and temperat, as Milk, Raiſins, Apples, &c. A Glaſs of generous Wine is very proper now and then; a moderat Exerciſe and the regular Evacuation of Excrements ought to be heedfully procur'd.

Now of the Medicines anſwering the foreſaid Intentions, Antimony is the chief both in its vomiting and purgative Capacity; but eſpecially the former. This and all other Emetics muſt be given in very large Doſes, tho' it is proper to begin with the ordinary one, and from thence advance gradually. The Flowers of Antimony, *Aurum Vitæ*, the Infuſion of *Mercurius Vitæ*, *Sylvius*'s vomitory Soap, and *Sala*'s emetic Syrup are all uſeful: As,

Take of Fumitory-water, an ounce; Gum-ammoniac diſſolv'd in Wine, from a ſcruple to half a dram; Emetic Syrup, a dram and a half; Scammony ſulphurated, Extract of Troches Alhandal, of each a grain; ſimple Syrup of Roſes, two drams. Mix for a Potion.

The Doſe of Purgatives muſt be likewiſe augmented or ſharpned with Salts: As,

Take of Extract of black Hellebor, a ſcruple; Extract of Troches Alhandal, two grains; purgative Antimony, or *Mercurius Vitæ*, five grains. With Eſſence of Steel, or Tincture of Tartar, make Pills. Or, if a Potion be more acceptable, with the Waters of Pimpernel, or of Flowers of St. *John*'s-wort, make a Potion, and ſweeten it with laxative Syrup of Apples.

The Troches Alhandal are of incomparable uſe for ſubduing the viſcid Matter, that reigns in this and all other chronical Diſtempers.

Take of Extract of black Hellebor, ſweet Mercury, of each a ſcruple; Magiſtery of Jalap, ſix grains: with Gum-ammoniac diſſolv'd in Vinegar, make Pills.

Take of pick'd Senna, two or three drams; Roots of Polipody, three or four Drams; Roots of black Hellebor, one or two drams; Salt of Tartar, half a dram. Infuſe them warm in clarify'd Whey over Night. In the Morning let 'em boil gently; and add to three ounces of the ſtrain'd Liquor, a dram and a half of Cinnamon-water; and three, four or ſix drams of Syrup of Apples. Or,

Take of Currans bruis'd, three ounces; pick'd Senna, ſix drams; choice Cinnamon, three drams; Cloves, a dram and a half; Cream of Tartar, three drams. Bruiſe 'em and tie 'em in a Bag, to be infus'd for the ſpace of a Night in three Pound of ſimple Water.

Take

Take of Gum-ammoniac dissolv'd in Vinegar, five grains; Tartar vitriolated, three grains; Extract of Gummy Aloe, two grains. With Essence of Gum-ammoniac make Pills.

Next to Hellebor and its Productions, are the Infusions of Senna; *Quercetanus*'s Pills of Ammoniac, or of Tartar, of Fumitory, *&c.*

Absorbent Digestives ought to precede the use of Purgatives; such are Cream of Tartar, Vitriol of Steel, or its Tincture, Essence of Steel, *&c.* Or,

Take of prepar'd Crabs, half a dram; prepar'd red Coral, Alterative Crocus of Steel, of each half a scruple. Make a Pouder for two Doses. Or,

Take of Sal-armoniac, Salt of Wormwood, and prepar'd Crabs-eyes, of each fifteen grains; Laudanum Opiatum, two or three grains. Make a Pouder for two Doses.

Alteratives in this Disease either correct the Acidity of the Blood, or amend its Indisposition, and purifie it by Urine.

Of the former kind are Preparations of Steel, such as its Infusion and Extract, with the Juice of Apples; all the aperitive Crocus's of Mars, *Mynsicht*'s Tincture of Steel, *&c.* Lead also, but especially its Sugar; Coral and its Preparations, and chiefly its true Tincture; in room of which, if it be wanting, you may take of the Tincture of Coral prepar'd with Spirit of Stag's Heart, or that of Roses, one dram; Essence of Baum and Saffron, of each half a dram. And mix 'em.

Of this sort also is the true Tincture of Silver and its Magistery, either alone or mix'd with other Anti-acids, as Coral and such like.

Mynsicht's *Arcanum Duplicatum* is frequently us'd with good success; likewise *Lapis Lazuli*, either in Pouder, or its Tincture mix'd as follows:

Take compound Essence of Pimpernel, three drams; Tincture of *Lapis Lazuli*, a dram. Dose from forty to fifty drops.

For altering and purifying the Blood by Urine, the vegetable Kingdom affords many excellent Remedies; amongst which Tartar and its Preparations excel, as Cream of Tartar plain or vitriolated; or, mix'd with lixivial Salts; Spirit and volatil Salt of Tartar; *Rhefeldius*'s diaphoretic Liquor of Tartar with Juices made thus:

Take of the expres's'd Juices of Dittander, four ounces; Scurvy-gras, Sea Radish, Water and Garden Cresses, of each an ounce; rectify'd Spirit of Tartar, one pound. Mix and digest, and then distil in a Bath over a slow Fire. Dose, half an ounce.

Reme-

Remedies also are prepar'd of Borrage, Bugloss, Fumitory, Saffron, Camphyr; which last ought always to be joined with Alteratives in melancolic and maniac Distempers. As, Take liquid Essence of Steel, two drams; compound Essence of Fumitory, and that of Saffron, of each a dram; Camphyr, five grains. Dose, thirty or forty drops. Or,

Take of the Leaves of Harts-tongue, two handfuls; of Fumitory, an handful and a half; Flowers of Borrage and Bugloss, of each a handful; of Clove Gilly-flowers and Violets, half a handful; Barks of Tamarisk and the Ash-tree, of each six drams; Roots of Polypody or Elecampane, Filings of Steel, of each an ounce: Cinnamon, two drams. Cut, bruise and tie them up in a Bag. Or,

Take of the Flowers of Rosemary, Borrage and Bugloss, of each four ounces; of Saffron, a dram; Quinces, four ounces; best White-wine, two pound. Mix and digest fifteen Days, and then distil. Dose an ounce, to be repeated every Day.

Take of *Hartman*'s cachectic Pouder, a dram; red Coral prepar'd, half a dram; Camphyr, fifteen grains. Mix and divide into three equal parts, to be taken in so many Mornings.

The following Pills may be taken before sleep.

Take of the Sugar of Lead, from five to nine grains; *Laudanum Opiatum*, two grains; distill'd Oil of Camphyr, three grains, and make Pills.

The Spirit of Sal-armoniac is an incomparable Sudorific, especially mix'd with an equal quantity of the carminative Spirit.

If Pains seize the Head, apply to the Forehead this Epithem.

Take Waters of Elder-flowers, and St. *John*'s-wort, of each an ounce and a half; Camphyr, six grains. Mix 'em.

This will yet prove more effectual, if a Plaister of Tacamahac be applied to the shaved Head.

If the Spleen is faulty, besides Preparations of Lead taken inwardly, apply the Plaister of Tobacco to the Region thereof.

Of Madness.

THe Blood which in Melancoly abounds with a vicious Acidity, is oftentimes by an intestin and fermentative Commotion volatilized, and so acquiring an Acrimony, and furnishing

ing the Brain with Spirits ſutable, occaſions Madneſs, which is Melancoly arrived at the higheſt degree.

In Madneſs we may obſerve three Circumſtances; 1. A remarkable Fury and temerarious Boldneſs, hurrying one to attempt any thing tho' never ſo cruel and tragical. 2. A prodigious Strength, able to break in pieces the ſtrongeſt things, and ſurpaſſing that of two or three Men. 3. A wonderful Sufferance of even the extreameſt Cold. It is alſo accompanied with moſt ſtubborn Watchings.

The Diſorder of the Stomach, *Inteſtinum Duodenum*, and Bowels under the ſhort Ribs, is the cauſe of the groſſneſs, thickneſs and vitious Acidity of the Blood, which is the immediat material Cauſe of Madneſs.

The formal Cauſe is the Spirits, which degenerating from their ſeminal and friendly Complexion, become of a ſharp, ſaline, and as it were ſulphureous acid Quality: and conſequently being too too moveable, and leſs capable to be check'd in their ordinary Motions, and withal penetrating every-where by virtue of their pointed parts, they become the Cauſe of Reſtleſneſs, Watchings, Fury, extraordinary Strength, &c.

This Diſeaſe is more incident to the Young than Old, to Men than to Women, but eſpecially to melancolic Conſtitutions.

If it proceed from internal Cauſes, it is an Evil of long continuance, and of difficult cure; which tho' it remit for ſome Months or Years, yet it often leaves Melancoly behind, which being eaſily exaſperated, returns with freſh Rage, and accompanies the Patient till Strength failing through Watchings, Faſtings, and almoſt perpetual Movings, it kindly ſhuts up their miſerable Life.

In curing this Diſeaſe we muſt endeavour, 1. To mitigat the Fury, that the Patient may be the eaſier manag'd, and Medicines exhibited. 2. To remove the Diſtemper of the Blood and Spirits.

The firſt is excellently perform'd by ſtrong Vomits and frequent Bleeding. Preparations from Steel and Lead, joined with anodine Medicines, correct the Blood and other Humors; as Remedies from Camphyr and Musk do recreat and reſtore the Spirits.

The Foundation therefore of the Cure muſt be laid by adminiſtring ſtrong and generous Vomits, not only in the beginning, but progreſs of the Diſeaſe: For this purpoſe the Ancients us'd white Hellebor-roots with excellent ſucceſs. But it ought not to be given in ſubſtance. Take

Take of white Hellebor-roots, from half a dram to a dram; boil them in Wine till it become ſoft: infuſe the Root thus prepar'd in freſh Wine all Night in a hot place; ſtrain the Liquor, or ſqueeze more or leſs, according to the meaſure of its deſired ſtrength. Doſe, a dram.

Some inſtead of this uſe Infuſions of antimonial Emetics, but they prove too weak. *Mercurius Vitæ* is good: *Aurum Vitæ Kegleri* is much commended; alſo the Leaves of Aſarabacca: but all theſe muſt be given in a greater Doſe than ordinary. As,

Take of the Conſerve of the Leaves of Aſarabacca, a dram; Pouder of its Roots, two ſcruples; *Mercurius Vitæ*, one grain: make a Bolus.

The Infuſion of human Nails, is alſo a ſtrong Emetic, ſurpaſſing thoſe of Antimony.

If in the beginning of this Diſeaſe Purging is required, you may uſe what I have above preſcrib'd for Melancoly; chiefly black Hellebor and its Extract; the *Extractum Melanogogum Quercetani*, &c. to which Antimony Purgative, or *Mercurius Vitæ* Laxative, ought ſtill to be added. As,

Take of the Eſſence of black Hellebor, a dram and a half; of that of Pimpernel, half a dram; Emetic Syrup of *Angelus Sala*, half an ounce.

After ſtrong Purgation, copious and frequent Bleeding is proper; firſt in the Ancle, then in the Arm and Fore-head: ſome have been cur'd by opening an Artery.

Cauterizing and Trepaning of the Skull have been ſucceſsfully uſed; as hath alſo Salivation by Mercury.

But while theſe things are a doing, ſuch Alteratives are to be given, as may reſtrain the boiling and wild Motion of the Blood and Spirits, and together with theſe Opiats and ſulphureous Minerals and fix'd Anodines, and that in a ſtrong Doſe.

Such altering Remedies as we preſcrib'd for Melancoly, may be us'd here. Particularly thoſe from Tartar, Steel, Lead, &c. But withal Nitre and its Preparations are not to be neglected. As,

Take purify'd Nitre, half a dram; Camphyr, eight grains; Mix 'em, and make a Pouder. Or,

Take purify'd Nitre, two ſcruples; *Laudanum Opiatum*, two grains. Make a Pouder.

We may alſo uſe appropriated Specifics, ſuch as the arterious Blood of an Aſs, Pimpernel with the red Flowers, St. *John*'s-wort, Fumitory, Water-lilly, Borrage, Baum, Spleen-

wort,

wort, the Herb True-love, Polypody of the Oak; to all which Camphyr may be added. As,

Take a clean Linnen Rag of a Hand's length and breadth, dipp'd in Asses Blood, infuse it in a sufficient quantity of Water of St. *John*'s-wort: to two ounces of the strain'd infusion add Essence of Pimpernel, half a dram *Laudanum Opiatum*, about a grain. Or,

Take the Leaves of True-love, together with the Berries, two handfuls; Leaves of red flower'd Pimpernel, Flowers of St. *John*'s-wort, of each an handful; Roots of Polypody of the Oak, an ounce; small Raisins bruis'd, two ounces: boil these in a sufficient quantity of Whey: to three pounds of the strain'd Decoction, add Essence of Pimpernel, an ounce and a half. Mix them. Or,

Take Leaves of Baum cut small, an handful; infuse 'em in four ounces of Spirit of Wine; add half a dram of prepar'd Pearl. Dose, two spoonfuls to be repeated every Day.

The Epitheme prescrib'd for Melancoly may also be us'd here. Or,

Take of Musk, twelve grains; Camphyr, a scruple; Red-rose-water impregnated with the Tincture of red Saunders, fifteen ounces. In this Mixture dip several Folds of Linnen Cloth to be apply'd to the shav'd Head and Temples, wetting the Cloth as it dries for twenty four Hours space; or anoint with the following Liniment.

Take of the Sleep-causing Ointment, two drams; distill'd Oil of Camphyr, a scruple; Musk, half a scruple; Saffron, eight grains. Mix 'em. Or,

Take Rose-water, or Juice of River-crabs, ten ounces; Opium, half a dram; Saffron, half a scruple: make an Epitheme for the Forehead and Temples.

ART. IV.

Of Deliriums *from an external Cause.*

THis Cause for the most part is the biting of some other Creature enrag'd with Anger, or taken with Madness. As in the case of a *Canina Rabies*, which is so called, because 'tis oftenest occasioned by the biting of a mad Dog; tho' the Infection may be deriv'd from any other Creature. For if any Creature chaf'd with Anger bites another, 'twill cause either Madness, or a very malignant and dangerous Wound.

The

The following Articles relating to this Diſeaſe are moſt worthy our Obſervation, *viz.* 1. The manner of Infection, which may be by the ſlighteſt bite or hurt of the mad Creature, or even the leaſt touch of its Spittle. 2. A *Hydrophobia*, or the fear of Water and other liquid things accompanies this Diſtemper. 3. The malign Contagion lies hid, and as it were aſleep in the Boſom, ſometimes two, three, or as ſome ſay, thirteen or twenty Years. 4. In the Spittle and Urine of rabid Animals are often ſeen other ſmall Creatures, reſembling the Form of the firſt Authors of their Madneſs. And laſtly, the infected Creature exactly imitates the Actions and Meen of that which gave the Contagion.

The Cauſe of this Diſeaſe conſiſts in a certain peculiar Ferment, which affecting firſt the Spirits, and then the Blood, does in ſome ſort aſſimilat them to thoſe of the furious Creature. This Ferment is carried along with the Saliva into Wound.

It is of importance to know whether the Creature by which a Man has been bitten, be mad or not, in order to prevention: the manner of the Diſcovery is this; apply and rub upon the Wound Crum of Bread, till it is impregnated with the moiſture, and if a Dog will neither eat nor ſmell to it, or dies if he does, 'tis a ſign the Creature was mad.

Sometimes this Diſeaſe is accompany'd with a Fever, and ſometimes not: The Signs that attend its beginning are, an anxious heavineſs of Heart; Anger without a manifeſt Cauſe; complaining of the offenſiveneſs of the Ambient Air; heavineſs of the Body, *&c.*

The Signs of a perfect Rabies are, Convulſive Diſtentions of the Members; bloated Face; anguiſh of Heart; frothing at Mouth; frightful Eyes; barking like a Dog, or otherwiſe aping the infecting Animal; reſtleneſs, perpetual Watching, *&c.* but eſpecially an *Hydrophobia*, or ſhrinking at the ſight of any Liquor.

If taken at the beginning, it may be cur'd with proper Remedies; but if it is come to perfection, and accompany'd with an *Hydrophobia*, it is an acute Diſtemper, which ſeldom admits of Cure, but brings death the ſecond or third, or at moſt the fourth Day from the Invaſion of this Sympton.

In the Cure of this fatal Diſtemper, two Periods of time are to be heedfully minded. 1. That of receiving the firſt Hurt or Wound. 2. That of the ſupervening Madneſs, and ſubſequent *Hydrophobia*.

To begin with the latter: we must endeavour by all means to explode that venomous Ferment that is already lodg'd in the Mass of Blood. This must be done by internal Antidots, as well common as specific: such are Roots of Gentian and Swallow-wort; *Galen*'s Mad-wort, Rue, St. *John*'s-wort, Pimpernel, *Carduus Benedictus*, Fuller's Thistle, Sage, Betony, Myrrh, and the like. As,

Take of the Leaves of Rue, Sage, Plantan, Polypody, Vervain, common Wormwood, Mint, Mugwort, Baum, Betony, St. *John*'s-wort, Lesser Centory, of each a convenient quantity; beat them into a Pouder, to be taken from one to two drams in hot Broth, or a draught of Wine, or in half a dram of *Venice* Treacle and Syrup of Lemmons, for forty Days together at least.

The Waters of Germander, *Carduus Benedictus*, Tormentil, *Venice* Treacle, white Maiden-hair, and the like, are convenient Vehicles for such Pouders.

Moreover, seal'd Lemnian and Melitean Earths are good; also *Venice* Triacle, Mithridat, *Electuarium de Ovo*, &c. but above all, *Theriaca Diatessaron* with Opium. As,

Take of the Water of the Flowers of St. *John*'s-wort, an ounce and a half; *Venice* Triacle, half an ounce; Bezoardic Tincture, a dram and a half; Essence of Crabs-eyes, a dram: mix them for one Dose. Or,

Take of *Venice* Treacle, one dram; Salt of Wormwood, half a dram; let them be taken in a Draught of sharp Wine.

The use of these and such like Antidots must be persisted in for two or three Months; for oftentimes after it has lain hid for some Months, nay sometimes Years, the *Hydrophobia* will again show it self; so that tho' the use of Sudorifics may, yet that of Specifics ought not to be discontinu'd. As for example,

Take of prepar'd Crabs-eyes, burnt Harts-horn prepar'd, and prepar'd Jaw-bone of a Pike, of each a dram. Mix, and make a Pouder.

The Cray-fish alone is a Specific against the biting of a mad Dog: They must be gathered in the Dog-days, and calcin'd alive: A dram or two of the Ashes, with a dram of Pouder of Gentian, may be given in a Cup of good Wine, the Patient being prepar'd for Sweating.

But the better way of exhibiting River-Crabs, is to distil them (being well bruis'd) with an Alembic in a Water-bath; so you shall have the fam'd Water of Crabs: and what remains at bottom may be given inwardly from half a dram to a

whole

whole one; in their own diſtill'd Water, adding Pouder of Gentian-root or Pimpernel. Or,

Take of *Venice* Triacle, a Dram; River-Crabs thus prepar'd, Roots of Pimpernel, of each half a dram.

The Root of the wild Roſe-tree is commended by the Ancients.

Stackerus us'd to give a dram of Pouder of Gentian, mix'd with as much *Venice* Triacle, every Morning for three Days, injoining the Perſon to faſt five or ſix Hours after, and make account to ſweat; having firſt ty'd on the Wound Garlic, Rue and Salt, bruis'd and mix'd in the form of a Cataplaſm: which Method he ſays never fail'd him.

Some Remedies are taken from the mad Creature it ſelf, ſuch as its Blood pulveris'd, given to a dram for three Days: Its Hair, Heart, or Liver boil'd or pouder'd.

Some plunge the Patient into cold Water over Head and Ears ſuddenly, keeping him under Water a ſmall time.

Purging is ſparingly to be us'd, and that only when the *Hydrophobia* is but juſt a beginning; in this Caſe white and black Hellebor, as alſo the Species of *Hiera picra*, are proper.

Strong Diuretics are not amiſs; among which Velerian and Cantharides are Specifics.

As to the Wound by which the Infection is receiv'd; ſo ſoon as poſſible the malignant Poiſon is to be drawn forth, leſt it diffuſe it ſelf through the Blood. Let the Hair of the mad Creature, if it can be had, be laid on the Wound: or the place being ſcarify'd and cleans'd with the exacteſt care, apply this Cataplaſm.

Take one of the ſharpeſt Onions, five Cloves of Garlic, and half of its Root; *Venice* Triacle, ſix drams; with half an ounce of Yeſt make a Cataplaſm.

Several other things may be added, ſuch as Hony, Muſtard-ſeed, Germander, Gentian, &c.

Some apply the Liver or Fleſh of the Creature, as alſo live Pigeons; others uſe Scarification and Cupping-glaſſes: others waſh the ſcarify'd Wound with Wine, or its Spirit camphoris'd, Brine, Salt Water, Decoction of Germander, or Gentian-root in Water or Wine; applying afterwards the following Plaſter.

Take ſix ounces of Wax, Oil of Olives and Goats-fat, of each three ounces; melt them, and add of the beſt Frankincenſe half an ounce.

The

The Wound is to be kept open for some time, or even enlarg'd; and if it is clos'd up before the compleat Cure of the Disease, it must again be open'd.

But the most safe, and withal the most speedy Remedy is burning with a hot Iron or an actual Cautery, which utterly destroys all the Poison, abolishing its seminal Crasis; and so leaves the Patient secure as to the fear of dismal Events.

This were the proper place to treat of the *Delirium Musicum* occasion'd by the biting of the *Tarantula*, and cur'd by Music; but seeing it is not to be found with us, we shall pass it over.

As for *Deliriums* proceeding from poisonous things, whether taken down by the Mouth, or drawn in with the Breath; the first is cur'd by a Vomit given at first; and the last, after universal things are premis'd, by Vinegar, Castor and Camphyr given together, or separately with proper Medicines.

As for Love-fits; they are remov'd partly by rational Perswasions, and partly by such Medicines as have been prescrib'd in Melancoly, and Melancolic Distempers, with this only difference, that the milder sort will here prevail.

AN ABRIDGMENT OF ETMULLERUS HIS *Practice of* PHYSIC, *&c.*

BOOK III.

Of the Diseases peculiar to the Male Sex.

HAving dispatch'd the Diseases incident to both Sexes; I shall now enter into the Consideration of those peculiar to Males.

SECT. I.

Of the Diseases which disorder the Genital Liquor in Mens Bodies.

SOME part of the Chyle accompanying the Blood in the Arteries, is convey'd by the Spermatic Vessels to the Stones, where 'tis in good measure prepar'd, by virtue of a particular Ferment for that purpose; and afterwards finish'd in the *Epididimes*, which forward it to the Seminal Vesicles, to be there reserv'd under the Character of the Genital Liquor, till the Act of Venery dislodge it. 'Tis improperly call'd *Seed*, till such time as the Association of the Woman's Genital Liquor have entitled it to that Character.

It is enrich'd with a large ſtock of Spirits, eſpecially by the eagerneſs of the Venereal Encounter, and is thereby enabled to reach and impregnat the Womens ſeminal Eggs. It is likewiſe cover'd with a ſoft ſerous Vehicle prepar'd in the *Proſtatæ*, that joins it in its Paſſage, and accompanies it thro' the *Urethra*.

The manner of its engaging with the ſeminal Eggs in Women, and their Counterpart in the Act of Generation, is accounted for elſewhere.

When the Generation of this Male Genital Liquor is diſtur'd, it appears in its Deficiency, Redundancy, or Depravation. The two laſt are referr'd to the Paragraph of Gonorrhæa's; the firſt is the Subject of the following Chapter.

CHAP. I.

Of the Defect or Inſufficiency of the Genital Liquor in Men.

THe Cauſes relate either to the Matter it ſelf, or the Stones in which 'tis prepar'd. As touching the former, naturally 'tis the Chyle, or mucilaginous, fat, milky part of the Blood, as appears by its Conſiſtence, Color, *&c.* Now whatever impairs this, muſt conſequently cauſe a Deficiency of Seed. Such are Hunger, the Diſorders of the digeſtive Faculty, exceſſive Evacuations, Watchings, *&c.* Violent Paſſions of the Mind, immoderat Exerciſe, and ſuch like, rarifie and ſharpen the Blood beyond its due pitch, and ſo exhauſt the Chyle or ſeminal Matter. Fat and corpulent Perſons are liable to the like Inconvenience. The milky part of their Blood, which ſhould be diſpos'd of for ſeminal Uſe, is diverted and anticipated by its converſion into Fat.

The Cauſes relating to the Stones, proceed either from the defect of the Ferment, or the indiſpoſition of the Stones themſelves. As for the former; queſtionleſs 'tis a ſpirituous oily volatil Subſtance, as appears by the notable Changes occaſion'd by it in the Maſs of the Blood at the time of its commencement. Now whatever fixes the animal Spirits, and ſtrips them of their volatil Capacity, muſt needs weaken the Ferment. Such are Spirit of Vitriol, crude Nitre; external Cold, or expoſing the Stones to be wet; application of mercurial things to the Region of the Pubes; exceſſive or unſeaſonable Venery, or an indiſcreet abſtinence from it;

Drunkenneſs; Crudities in the Stomac, or any Diſorder o the firſt Digeſtion; Dropſies, Cachexies, &c.

If the Deficiency of the Ferment be occaſion'd by an Cauſe reſpecting the Stones themſelves, it muſt proceed ei ther from Tumors in 'em, or from being gelded. 'Tis muc doubted if there be any natural Eunuchs; for many whoſ Stones are not viſible, may have 'em hid within the Abdo men, and give ſufficient proof of their Manhood.

The Signs are eaſily diſtinguiſh'd: If the Ferment b faulty, the Perſon is dull and unactive; the venereal Appe tit flat; and the Seed when caſt forth is thin, watry, and voi of heat. The Prognoſtics are more fatal to the *Species* tha to individual Perſons. If the Perſon be old, or have over acted in his Youth, the Cure is very difficult. Sometime this Deficiency produces not only Effeminacy and Unmanli neſs, but an univerſal Faintneſs and Conſumption, for wan of the due Influence of the Ferment upon the Maſs of Blood.

In regulating the Cure, a peculiar regard muſt be had t the Stomac and digeſtive Faculty; for the flatneſs of this wil cauſe a Deficiency of Seed. If the Diſeaſe proceed from Defect in the Stones themſelves, the following Paragraphs ac count for its Cure. As for the Faults of the Ferment, o thoſe reſpecting the Matter of the Genital Liquor; the for mer muſt be amended by aromatic ſharp Incentives; ſuch a Ginger, Amber, Cubebs, Cloves, Cinnamon, Caſtor, Savin berries, Borrace, Satyrium, Eryngo, Muſtard-ſeed, Fennel ſeeds, Rocket-ſeeds, Pepper, Cantharides, Spirit of Ants, &c. The latter by temperat Fat, and Chyle-like Ingredients, a Milk, the milky Seeds, Emulſions, Yelks of Eggs, with Spaniſh Wine, Oyſters, Chocolate, Dates, &c. But neither of 'em ought to be us'd ſeparatly; but in conjunction with one ano ther. As,

Take of Milk, three ounces; Sugar, three or four drams; Pepper, half a dram: mix for a Draught.

Take of the Oil of Fiſtic-nuts, one ſpoonful; the Yelk o one Egg; Ambergriſe as much as will lie upon the Point o a Knife, with the triple quantity of Sugar. Mix 'em before the Fire, and exhibit for one Doſe.

Take of the Water of Magnanimity, three ounces; Cin namon-water prepar'd with Wine, Eſſence of Satyrium, of each three drams; Tincture of Coral, two drams; Eſ ſence of Amber, a dram. Make a Potion. Doſe, a ſpoon ful now and then. Electuaries are very uſual in this Caſe. As,

Take

Take of Indian Chocolat, an ounce and a half; Electuary of Satyrium, half an ounce; Eryngo-roots candy'd, Satyrium-roots candy'd, of each six drams; Nutmegs candy'd, two drams; candy'd Ginger, two or three drams; Shavings of the Pizzle of a Stag kill'd in the Act of Venery, half an ounce; Cubebs, Cardamoms, of each a dram; Powders of *Diambra*, and *Diamoschus dulcis*, of each four scruples; Rocket-seeds, Fistic-seeds, Nettle-seeds, Ash-seeds, of each a dram; Ambergrise and Mosch, of each ten grains. With Syrup of Canel make an Electuary; and when you are about to use it, sprinkle it with Spirit of Ants. Dose, the bigness of a Walnut.

Take of the Electuary *Diasatyrium*, a dram; *Mynsichtus*'s provoking Tablets, a scruple; Ambergrise, Mosch, of each two grains; *Laudanum Opiatum*, one grain. Mix for a Bolus.

Take of the Conserve of Eryngo-roots, Conserve of Satyrium, of each three ounces; candy'd Citron-peel, candy'd Ginger, of each half an ounce; Pine-nuts, Sweet Almonds, and Fistic-nuts, of each three or four drams; Pulp of Dates and Nutmegs, of each an ounce; Bull's Pizzle, five drams; Rocket-seeds, Parsnep-seeds, Mustard-seeds, of each two drams; Cinnamon, Galangal, and white Pepper, of each a dram; distill'd Oil of Cloves, half a dram: With the *Brodium* of Ginger make an Electuary. Some add the Powder of Cantharides, but they are improper for any purpose of this nature, unless it be that of promoting the Erection of the Yard.

The Stones of a Cock, or the Spirit of a Cock's Blood; the Blood, or Brains, or Pizzle of a Buck or Bull kill'd in the Act of Venery; or the Shaving of a Bull's Horn taken at the same time; the Tincture of Gold with Oil of Cinnamon; the Troches of Vipers, or Pullets fed with Vipers; Borrace taken in a potch'd Egg, *&c.* are all approv'd Remedies for provoking Venery.

External Inunctions are not improper. Let the *Perinæum*, Cod, Stones, Groyn, and Nut of the Yard, be anointed with the Apoplectic Balsam; or distill'd Oil of Mace with Oil of Cloves, Mosch and Civet; or with the Spirit or Juice of Ants. But care must be taken that their smell do not reach the Nostrils.

As for the Causes of the Deficiency of the Seed relating to the Stones; if they be hid within the Abdomen, we must endeavour to bring 'em down by jumping, leaping, *&c.* by

emollient Baths, and anointing the place where they are lodg'd with Balſam of Sulphur.

The Swelling of the Stones is occaſion'd either, 1. By Blood, and is call'd an Inflammation. Or, 2. By Wind call'd *Pneumatocele*. 3. By a Collection of Serum within their Membrans, call'd *Hydrocele*. 4. By a ſchirrous Tumor. 5. By a ſuperfluous Fleſh, call'd *Sarcocele*. 6. By the dilatation of the Spermatic Veſſels, call'd *Hernia Varicoſa*. Of theſe in order.

ART. I.

Of the Inflammation of the Stones.

THE Stagnation of the Blood cauſes Inflammations of the Stones or Cods. That may be occaſion'd by the ſuppreſſion of a Gonorrhæa, violent Ligatures, Contuſion, Blows, Compreſſion by Riding, &c.

The Signs are a pricking ſhooting Pain, notable heat and redneſs beſetting the affected Teſticle and neighbouring Parts, accompany'd by a ſlow Fever. The Pain is exaſperated by touching, and reaches almoſt to the Loins.

If it be not quickly diſcuſs'd, it tends to a Gangrene or Impoſtume, eſpecially the Inflammation of the Cod.

The Cure conſiſts in diſcuſſing the Swelling, and mitigating the Pain. If that cannot be obtain'd, it muſt be ripen'd and open'd. For the former purpoſe, Bleeding and the common Evacuations, and ſuch gentle Diaphoretics as promote the circulation of the Blood, are the proper internal Remedies.

Outwardly apply the following Cataplaſm. Take of the Meal of Beans, three or four ounces; Pouder of Cummin ſeeds, two ounces: With Vinegar make a Cataplaſm. If the Vinegar be too ſharp, add Lytharge of Ceruſe from one to three ounces. (For Lead and its Productions dulcifie the ſharpneſs of Vinegar.) Apply this Cataplaſm warm to the part, for all ſorts of Inflammations.

Take of Quick-lime-water, a pound, or a pound and a half; Spirit of Wine camphoris'd, half an ounce, or an ounce; Ceruſe or Sugar of Lead, a dram and a half. Make an Epithema to be applied hot: And if the Pain be violent, add of Opium diſſolv'd in Vinegar, one ſcruple.

For venereal Inflammations let the Part be fomented with the Decoction of *China*-roots and Elder-flowers in Ale or Wine.

Rue

Rue, Agrimony, Vervain, Chamomile, the Herb *Paris*, Elder-flowers, &c. are also proper Ingredients for Cataplasms or Decoctions. If the Pain be violent, add to them Leaves of Henbane, thus:

Take of the Leaves of Wormwood, Lady's Mantle and lesser Centory; the Flowers of the Sloe-tree, Chamomile and Mullein, and Leaves of Henbane, of each a handful. Boil them in Wine with a little Water, and apply the strain'd Liquor with a warm Cloth to the Part. The Mucilage of Flea-wort-seeds, extracted with Water of Frog's Spawn, may be added to the foregoing Ingredients.

If the Tumor cannot be discuss'd, emollient suppurating things are proper; particularly the Plaister call'd *Filii Zachariæ* soften'd with Balsam of Sulphur prepar'd with Oil of Turpentin. If the Pain be overbearing, let the Leaves of Henbane be rosted under the Ashes, bruis'd and applied with Lard in the form of a Cataplasm. When the Swelling is ripe, let it be open'd with a Lance by a skilful Surgeon.

ART. II.

Of a Pneumatocele, *or Distention of the Stones by Wind.*

IT is often-times accompany'd by a *Hydrocele* or Collection of Water. The Wind is either deriv'd from the *Abdomen*, or owing to the acid vicious Quality of the nutritious Liquor of the Membrans surrounding the Stones.

The Signs are a Swelling and distending Pain, without any sense of Weight. If it likewise seize the Cod, it moves too and again when press'd by the Hand.

All internal carminative Medicines are proper. Externally let carminative and discussing Cataplasms be applied. As,

Take of the Pouder of Chamomile and Melilot-flowers, and Meal of Beans, of each six drams; Goats-dung and Bay-berries, of each half an ounce. With Wine and Oil of Dill make a Cataplasm.

Take of Cows-dung, two pound; Brimstone and Cummin-seed, of each an ounce. With Hony or Oil of Dill make a Cataplasm. This is more effectual than the former.

If it be accompany'd by a *Hydrocele*, anoint the part with Balsam of Sulphur prepar'd with Oil of Turpentin or Juniper, and afterwards apply *Rulandus*'s Plaister *Diasulphuris*, temper'd with Oil of Nutmegs by expression. Or,

Take of Coriander-ſeeds, half an ounce; Cummin-ſeeds, Aniſeeds, of each two drams; Allum, half a dram; Wine, common Water, of each a pound; and foment with the Infuſion.

ART. III.

Of a Hydrocele, *or Collection of Water within the Membranes of the Stones.*

THE Cauſe is the Rupture of the Lymphatic Veſſels in the Stones, or whatever ſtops the Reflux of the Lymph from thence.

The Signs are a ſenſe of ſomething floating in the Cod, the alteration of the Form and Bigneſs of the Stone, the lucid and unwrinkled Appearance of the Cod before a Candle. At firſt the Swelling is ſoft and yields to the touch, but does not retire into the Belly by lying down or compreſſion; afterwards by continuance it becomes harder, but is capable of receiving Pits, and the Membrans grow thick and ſtiff.

The Cure is perform'd inwardly by Antihydropic Medicines. Externally let the Balſam of Sulphur prepar'd with Oil of Turpentin, or *Schroder*'s Plaiſter *ad Herniam*, or the *Ausburg* Hydropic Plaiſter be applied. Or,

Take of the Plaiſter of Bay-berries, Goat's Dung, of each an ounce and a half; Cumin-ſeeds, Flowers of Sulphur, of each two drams. Mix with the Oil of Rue and Chamomile, and make a Plaiſter.

Take of the Flowers of Chamomile, of the Herb *Paris*, of each two handfuls; Meal of Beans, from half an ounce to an ounce; Goat's Dung three ounces; Pouder of Cockle-ſhels two ounces. Boil them in four parts of Chamomile-water, and one part Vinegar, to the Conſiſtence of a Cataplaſm.

Take of Goat's Dung one pound; Chamomile-flowers, Elder-flowers, of each two handfuls; Cumin-ſeeds, an ounce. Boil them in Child's Urine. Foment with the ſtrain'd Liquor; and make a Cataplaſm of the remainder.

Take of Cockles bruis'd together with the Shells four ounces; Bay-berries, Brimſtone, of each two ounces; Goat's Dung three ounces. With Lees make a Cataplaſm.

If a *Hydrocele* be inveterat, all external Diſcuſſives are in vain, and only Surgery can afford relief. There are two ways by which it performs the Cure. 1. By pricking, or boring

boring a hole in the Cod and outermost Coat of the Stone, under which the Lymph is wont to be lodg'd. This is a safe Operation in a simple *Hydrocele*; but in hydropic Tumours for the most part it causes a Gangrene. 2. By cutting away the affected Stone; for oftentimes it relapses after a pricking, or the neighbouring parts are in danger of a Gangreen, in which case Amputation is absolutely needful.

ART. IV.

Of the Schirrous Swellings of the Stones.

A Hard painless Swelling, free of all Inflammation or Heat, is call'd a *Schirrus*. If a pricking Pain attend a hard Swelling it degenerats to a Cancer.

The Cause is the indiscreet Treatment of a preceding Inflammation, which gives the accompanying Acid liberty to settle and thicken the matter. *Platerus* mentions an Instance of little Stones within the *Testes* causing a Schirrus.

As for the Cure, 'tis perform'd by the Application of Gums dissolv'd in Vinegar, and discussive Plaisters. As,

Take of Gum-ammoniac dissolv'd in Vinegar, six drams; Plaister of Hemlock soften'd with distill'd Oil of Tartar, as much as sufficeth for a due Consistence.

The Balsam of Sulphur, or *Rulandus*'s Plaister *Diasulphuris*, or the *Auburg*-Plaister of Ammoniac, are of good use. Baths of Wine, and, in venereal Cases, the Plaister *de Ranis* with *Mercury* are not improper. *Timæus* recommends the following Composition.

Take of the Mucilage of Marshmallow-roots, Fenugreek-seeds, and fat Figs tosted, of each three ounces; Gum-ammoniac, *Bdellium*, *Galbanum*, of each an ounce; Goose-fat, Hens-fat, Goat's Tallow and Turpentin, of each six drams; Oil of Lillies, and Wax, as much as sufficeth for a Plaister.

If it be attended by Pain, we ought to proceed very cautiously for fear of a Cancer; upon which account gummy Ingredients are only to be insisted upon. If it tend to suppuration, it must be open'd, or the Stone cut quite off.

ART.

ART. V.

Of a Sarcocele, *or fleſhy Swelling of the Stones.*

EXternal Blows, Falls, and ſuch like Accidents do not only cauſe Inflammations, but ſometimes tear the Veſſels and Membrans of the Stones, and ſo oblige the Blood and nouriſhing Juice to ſtagnat and ſettle into a fleſhy Subſtance, ſticking to one or both the Stones, or to the Membran of the Cod call'd *Dartos*.

The Signs are theſe; the Swelling is indolent, hard, conſtant, and increaſes by degrees. There is a near reſemblance between it and the ſwelling of the *Epididimes* occaſion'd by a Redundancy of Seed, or the Stagnation of the Blood caus'd by the Schirrus of the Stones; but the preceding Signs, if carefully trac'd, will diſcover the difference.

If it be attended by a ſhooting, it diſcovers a malignant nature and tendency to a Cancer, and ought not to be meddled with.

As touching its Cure, inward Remedies are ſeldom effectual. Let the univerſal Evacuations be firſt premis'd; then exhibit the Antiſcrophulous Specifics, as the Pouder, or Decoction, or Eſſence of Reſtharrow-roots, and dulcify'd Spirit of Salt; Pouder of Comfrey-roots, ſeal'd Earth, Rupture-wort, and Spunge-ſtone, *&c.* Outwardly foment with a Mixture of Vinegar, Nitre, and the Aſhes of Vine-twigs: or apply a Cataplaſm of Sulphur, Cockle-ſhells, and Vinegar, or the following Plaiſter, which is nightily extoll'd.

Take of Gum-ammoniac, an ounce and a half; Bdellium, Muſtard-ſeeds, Nettle-ſeeds, of each ſix drams; Spunge-ſtone, one ounce; Pouder of Birthwort-roots, Sulphur, of each half an ounce; Turpentin, an ounce; Spirit of Wine, an ounce and a half; Oil of Olives, four ounces; Wax, ſix ounces. Make a Plaiſter.

Take of the Gums *Animi*, Sagapenum, Opoponax, and Galbanum, of each an ounce. Diſſolve 'em in Vinegar of Roſes. Then thicken it, and with a ſufficient quantity of Oil of Bricks, make a Plaiſter; which is equally fitted for Suppuration or Diſcuſſion.

If it tend to Suppuration; after opening, apply the Plaiſter of Gums and black Roſin; and afterwards, when 'tis proper to conſolidat, a ſtyptic Plaiſter. *Vigo*'s Plaiſter with

Mer-

Mercury is of incomparable use, but the Mercury may deprive the Stones of their prolific Virtue. The natural Baths are of very good use.

If these Medicines prove ineffectual, the Excrescence must be cut out either alone or together with the Stone, as its Circumstances will admit.

ART. VI.

Of a Distention of the Spermatic Veins, or Hernia Vericosa.

WHatever disturbs the Reflux of the Blood by the Spermatic Veins, causes an uneven, inconstant sort of rising towards the Stones, resembling a Cluster of Grapes. The Stone drops and hangs loose, and the Swelling is painless unless the Guts be molested with Wine, or the Feet expos'd to cold.

Bathing is very proper. Let the Plaister of Mucilage mix'd with the Plaister of Ammoniac and Oil of Bricks; or the Ointment *Basilicum* mix'd with the Fat of Animals, be applied to the Part.

It it be inveterat, it must be committed to the care of a Surgeon.

CHAP. II.

Of the irregular Ejaculation of the Seed.

THe Ejection of the Genital Liquor is irregular; 1. When 'tis cast forth without any Venereal Provocation. 2. When in the Act of Venery its Egress is too precipitant and hasty. 3. When 'tis too slow. 4. When 'tis not ejected at all.

ART. I.

Of a Running, or Involuntary Emission of the Genital Liquor.

A Running is either spurious or genuin. To begin with the last, a simple running is said to be such, when the true, genuin, seminal Matter is cast forth without the erection of the Yard, or venereal Pleasure.

The

The Part affected is the ſeminal Veſicles; 'tis attended or follow'd by a wearineſs of the Limbs, Weakneſs, inability to move, a pale Countenance, hollow Eyes, diminution of Sight, Inappetency, Trembling, and Tendency to a Conſumption. In a word, it robs the Body of its balmy Moiſture.

The Cauſes are threefold; 1. The Redundancy or Turgeſcence of the ſeminal Matter. 2. Its Sharpneſs, which ſtimulats and contracts the Fibres of the ſeminal Veſicles, and adjacent Muſcles. 3. Its Tenuity and Watrineſs, together with the concurring Flaccidity of the Veſicles, and the Patency of their Paſſages into the Urethra.

The remote Cauſes of the firſt are high Feeding and Drinking; an intire freedom from Labour and Care; abſtaining from the wonted Meaſure of Venery; frequent Correſpondence with venereal Objects; lying upon the Back, &c.

The remote Cauſes of the ſecond, are a ſharp ſaltiſh Diſpoſition of the Blood, as in ſcorbutic and hypochondriac Conſtitutions; an immoderat uſe of ſharp aromatic volatil Things, as Pepper, Muſtard, Rocket-ſeeds, Water-creſſes, Wine, Cantharides, and ſharp volatil Purgatives. Thoſe of the third are, exceſſive Venery (eſpecially in ones Youth) and manual Violence, which not only relaxats the ſeminal Veſicles, but deſtroys the Ferment in the Stones, as appears by the watry inelaborat Conſiſtence of the Seed.

If a genuin Running be inveterat, it degenerats into a Hectic, and is not eaſily cur'd; nor is it ſafe to ſtop it ſuddenly, leſt the Suppreſſion of the wonted Evacuation ſhould cauſe an Inflammation or Tumor in the Teſticles.

The general Indications of Cure, are to leſſen the vicious Quantity, or qualifie the Sharpneſs of the Matter, or to corroborat the Ferment and Texture of the Parts.

For the firſt of theſe Purpoſes, acid thin Food, ſhort Commons, frequent Exerciſe and Watchings are proper. Spirit of Vitriol and crude Nitre powerfully curb the Ferment of the Teſticles: But the Juices of Citrons, Pomegranats and Lemons, are more temperat and univerſally applauded for ſtopping all manner of Runnings. The Juice of Lemons with Spirits of Turpentin and Camphyr, is extoll'd by *Faber*. Some commend the Solution of Coral with Juice of Citrons. Emulſions of Hempſeeds are of ſoveraign uſe in deſperat Runnings, but they enjoy a narcotic Virtue prejudicial to the Animal Spirits.

Take

Take of the Seeds of the Chaft-tree, Melon-ſeeds, of each two drams; Hemp-ſeeds, white Poppy-ſeeds, of each a dram and a half: With the Waters of Purſlain and Water-Lillies make an Emulſion. To which add the Bone of the Cuttle-fiſh prepar'd, a dram; *Crollius*'s compound Pouder of *Sperniola*, two or three ſcruples; prepar'd white Amber, and diaphoretic Antimony, of each half a dram: mix and ſweeten with pearled Sugar. This is of noted efficacy, eſpecially if the *Perinæum* and Loins are girded with heat. Some commend the following Decoction.

Take of the Leaves of white Archangel, four handfuls; Leaves of white Yarrow, two handfuls; Seeds of the Chaft-tree, four or ſix drams. Boil them in Mint or Rue-water, or in Wine, and ſweeten with Syrup of Water-Lillies.

Some recommend a Spoonful of the Juice of Ceterach to be taken now and then, as a ſingular Remedy for ſtopping a *Gonorrhœa*; as alſo two drams of the following Pouder to be taken in chalybeat Wine.

Take of the Leaves of Mint and Rue, Seeds of the Chaft-tree, and Pouder of Galls, of each equal quantities. Beat 'em into Pouder for the uſe above-mention'd.

Spirit of Turpentin and Sugar of Lead is a delicat Remedy. The Juice of Yarrow or of Mallows with ſweet Milk is alſo approv'd. Some apply outwardly the Juice of Lettuce with Camphyr to the Teſticles.

As touching the ſecond Indication, *viz.* qualifying the ſharpneſs of the ſeminal Matter, the Tincture of Coral with Spirit of Woods, or of Saſſafras, is very uſeful. The Aſtringent Crocus or Tincture of Steel, Sulphur of Vitriol, Sugar of Lead, and white Amber prepar'd, are all very proper. Or,

Take of the Conſerve of red Roſes, Conſerve of Mint, of each an ounce or an ounce and a half; prepar'd Bone of the Cuttle-fiſh, (which in this Caſe is a noted Specific) two drams; calcin'd Borace, a dram; Nutmegs, half a dram; Syrup of dry'd Roſes, as much as ſufficeth to make an Electuary. Of which the Patient may take a convenient quantity twice or thrice a Day. Crude Borace provokes Luſt; but when calcin'd, it leaves a ſtyptic *Caput Mortuum* of contrary uſe.

Take of prepar'd Chryſtal, Bone of the Cuttle-fiſh, prepar'd Amber, of each two ſcruples; chalybeat diaphoretic Antimony, a ſcruple: *Crollius*'s Sperniola, a ſcruple; Sugar of Lead, fifteen grains. Make a Pouder for five or ſix Doſes.

The

The Turpentin of Cyprus reduc'd to Pills with prepar'd Amber, or Crocus of Steel, or Rhubarb, is very effectual. Of late the Balsam *Caparvi* is mightily esteem'd. Sugar of Lead, and the antiphthisical Tincture prepar'd with it is of noted efficacy.

Take of the Waters of Rue and Water-lillies, of each half an ounce; Juice of Lemons, six drams; Bole-armenic, a dram; Cuttle-bone, and diaphoretic Antimony with Steel, of each two scruples; Syrup of Citrons, half an ounce. Mix, and give a spoonful now and then.

If the Yard be exulcerated by the sharpness of the Matter, take of Woman's or Cow's Milk, four ounces; prepar'd Tutty, two drams; Aloe, a dram; Sugar-candy, half a dram. Mix, and inject half an ounce or six drams at a time.

As for the third Indication, *viz.* corroborating the relaxted Ports, and correcting the Watriness of the seminal Liquor; Mint, Wormwood, Amber, Mastic, astringent Tincture of Steel, Tincture of Coral, Pouder of Frankincense, (which if too frequently repeated, causes a suppression of the Urine) Sugar of Lead; Extract of Tormentil-roots; seal'd Earth, and Bole-armenic us'd with Vinegar; Tincture of the Sulphur of Vitriol, *&c.* are all proper Ingredients.

Take of the Extract of Tormentil-roots, two drams; *Crollius*'s compound Pouder of *Sperniola*, two scruples; Plantain-seeds, Seeds of chaste Lamb, Roots of Comfrey, of each a scruple; *Venice* Turpentine boil'd, Camphyr, of each twelve grains. Make Pills.

I have cur'd a desperat Running with giving thirty or forty drops of the Tincture of Sulphur of Vitriol in a warm Vehicle every Morning; and half a dram of the Troches *de Carabe* every Evening; without any other Injunctions, except that of lying on the Sides, and a spare Diet.

If in the Declination of this Flux, a thin, watry Humor continue to run, as it frequently happens; take of Gum Arabic, Tragacanth, prepar'd white Amber, prepar'd Mummy, Bole-armenic, of each a scruple; *Laudanum Opiatum* half a scruple. With a sufficient Quantity of the Tincture of Catechu, make Pills for five Doses.

The natural Baths that partake of Allum are proper in an inveterat Case.

Outwardly the Parts may be fomented with the Decoction of the Rinds and Flowers of Pomegranats, Roses, Comfrey-roots, Plantain, *&c.* or let the Perinæum be anointed with the following Mixture. Take

Take Oil of Myrtles, three drams; distill'd Oil of Mastic, a dram; distill'd Oil of Cloves, express'd Oil of Nutmegs, of each half a dram. With Wax make a Liniment.

If the Ferment of the Testicles be deficient, Milk, Rice, Eggs and aromatic Ingredients are proper. Often-times 'tis needful to purge in the beginning and progress of the Disease; as thus,

Take of boil'd Cyprus Turpentine, a scruple; Scammony prepar'd with Juice of Roses, Rosin of Jalap, of each five grains. Make Pills for one Dose.

I am now arriv'd at the spurious Flux of Seed, which is call'd such when the Matter voided is of a different Nature from the Genital Juice, being discolour'd, sharp, stinking, attended sometimes by Pain and other Symptoms; but not occasion'd by venereal Actions, or partaking of any venereal Virulency. It corresponds to the Whites in Women, and is call'd by some *Gonorrhœa Catarrhalis*; but there are few Authors that have taken any notice of it.

The Part affected is the *Prostratæ*, whose Office 'tis to separat a Lymph for a Vehicle to the Seed. Now if they are relaxated and exulcerated, they separat and void larger quantities, as in the like case the Glandules of the Eyes, or those in the Throat, are wont to do.

The material Cause is the serous cachectic Disposition of the Blood. The remote Causes are the Disorders of the Stomac and digestive Faculty, or whatever furnishes the Blood with crude and watry Particles. The formal efficient Cause is the Relaxation of the *Prostratæ*, occasion'd by excessive Venery, manual Violence, Riding, a Fall, &c.

Tho' this Flux may serve to cleanse the Blood, yet if it continue long, it degenerats into a Consumption.

The Cure turns upon corroborating the Stomac, correcting the Crudity of the Blood, and cleansing and fortifying these Glandules. The first of these Designs is compass'd by the use of Wormwood, Mint, Rosemary: The second by the Decoctions of Woods with Tormentil, Essence of Sassafras, volatil Salt of Amber, Turpen, Mastic, Gum Animi, Pouder of Frankincense taken in a potch'd Egg, drinking Spaw-waters, &c. After which bathing in natural Baths, or artificial ones partaking of Allum, answers the third Indication. But this last is not to be attempted till the former are accounted for.

As for the virulent Clap, 'tis referr'd as a Symptom to the Pox, of which elsewhere.

ART.

ART. II.

Of the overhaſty Ejaculation of the Seminal Matter.

THis was the ſecond Diſorder relating to the Ejection of Seed. The Cauſe is either the Patency and Looſeneſs of the ſeminal Veſicles, or the ſpirituous Turgeſcence and over-bearing youthful Heat of the ſeminal Liquor. The former is remov'd by the internal and external uſe of Aſtringents, ſuch as we preſcrib'd in the foregoing Article. The ſecond by the uſe of Opium, which ſtays the Spirits, and prevents their early flight. Upon which account it is much in uſe among the Indians and Turks, whoſe Women are moſt delighted with deliberat and prolong'd Embraces. But it ought to be mix'd with Ambergriſe; as if Opium were added in the Preparation of the Eſſence of Ambergriſe; in order to prevent any ſucceeding Stupidity.

Henricus ab Heer mentions a quick Ejaculation of Seed, caus'd by the irritation of an Ulcer in the *Inteſtinum Rectum*.

ART. III.

Of the overflow Ejaculation of the Seminal Matter.

OFten-times when the Blood inflames the Yard to an Erection, the Spirits are deficient in quickening the Seed; or the Muſcles of the Yard are languid, or the ſeminal Veſicles flaccid and unable to counterpoize the force of the Proſtratæ and neighbouring Parts, which in the venereal Fit ſwell up, bear in upon 'em, and contract their Paſſages; inſomuch that they cannot eject the Seed in due time, but it often ſlips out when the Yard is down, and the Turgeſcence of the Parts gone.

Caſtor and ſharp aromatic cephalic Medicines are proper to be given inwardly. Externally let the Root of the Yard be anointed with expreſs'd Oil of Nutmegs, or diſtill'd Oil of Mace, or of Cloves, mix'd with Civet or Moſch, or the Oil or Spirit of Ants.

ART.

ART. IV.

Of Caruncles in the Yard, hindring the Ejection of Seed.

THE fourth and last Head relating to this Chapter, is, when the Seed is not ejected at all, by reason of a fleshy Excrescence in the Yard stopping its Passage. The Cause for the most part is a virulent Clap; in which the Urethra is corroded, and the Nourishment naturally repairing to the corroded Part settles into a fleshy wartlike Substance.

Sometimes, instead of Seed, Blood is voided, sometimes Wind. In the former case, Astringents; in the latter, Evacuating and Carminative Medicines are proper.

SECT. II.

Of the Disorders relating to the Erection of the Yard.

THERE are two main Qualifications requisit for performing the Office of a Husband; one is the due Erection and Stiffness of the Yard; the other the regular Ejaculation of the Seed thro' the Yard thus prepar'd. This was the Subject of the preceding Section: The former lies now before us. In order to set it in a clear Light, we must distinguish the Turgescence and Distention of the Yard from a due Erection. The former proceeds from the influx of arterial Blood into the two nervous Bodies; but this Distention is continu'd and wrought into a State of Rigidity and Erection by the Contraction of the two Pair of Muscles seated at the Root of the Yard, which compress the Vein that runs along its Back, and so hinder the reflux of the Blood. When their Contraction ceases, the Blood that distended the Yard is discharg'd by this Vein, and leaves it in a drooping condition. So this Contraction of the Muscles is the cause of Erection, and is in a great measure promoted by the spirituous and provoking Quality of the Seed in the Seminal Vesicles.

What is needful to be said of the Faults of Erection will fall under the Heads of its Deficiency, Excess or Depravation.

CHAP. I.

Of Impotency, or the Defect of Erection of the Yard.

IT proceeds either from the Relaxation of the two Pair of Muſcles and Inactivity of the Spirits, or the Flatneſs of the Seminal Liquor.

The Muſcles may be relaxated by a Palſie, exceſſive Riding, a Fall or Blow upon the *Os Sacrum*, a Wound of the Head affecting the reſpective Nerves, mercurial Inunctions, external Cold, &c. The Spirits are faulty when they are univerſally weak and languid, as in old Age and Sickneſs; when they are diſorder'd by Paſſions of the Mind, ſuch as Baſhfulneſs and Fear, (of which we have ſeveral Inſtances in new married Youngſters, that fancy themſelves bewitch'd) or diverted by dwelling upon other Objects, or baulk'd by hypochondriac Deſpondency.

The Genital Juice is faulty, when 'tis not duly prepar'd, or falls ſhort of its ſpirituous ſtimulating Quality. This may be occaſion'd by old Age, Defects in the Stones, or any Diſorder of the Genital Parts; or by the continu'd uſe of Nitre or Camphyr.

This Diſeaſe is manifeſt of it ſelf. All the uſe of Signs is to diſtinguiſh the Cauſes. If the Muſcles are paralytic, they are equally unmovable by all other Objects. If the Animal Spirits are deficient, an univerſal Feebleneſs ſeizes the whole Body. If hypocondriac Fancies, melancoly Thoughts or Paſſions of the Mind occaſion it, the Circumſtances of the Patient will diſcover 'em.

The Cure conſiſts in recovering the Force and Spirituality of the Seed, and the regular Influx of the Spirits into the Muſcles. The internal Medicines anſwering theſe Indications are largely accounted for in the preceding Section. In *England* Ambergriſe and *Laudanum Opiatum* are mightily extoll'd. Cantharides mix'd with aromatic Pouders are of noted efficacy.

Take of preſerv'd Roots of Satyrium and of Eryngo, Pine-nuts, of each two ounces; candy'd Ginger, Nutmegs candy'd, of each an ounce; Confection Alkermes, half an ounce; Rocket-ſeeds, Seeds of Creſſes, of each two drams; white Pepper and Cloves, of each a dram: With Syrup of Cinnamon make an Electuary.

Ex-

Externally, Cephalic Baths, Fomentations, and rubbing the Parts before the Fire are proper. Let the Decoction of Cubebs in Wine be applied to the Testicles and adjacent Parts; or anoint the Perinæum, Cod, &c. with *Mynsicht*'s Venereal Balsam mix'd with Oil of Ants.

Take of the Juice of Parsneps, Oil of Mustard, of each two drams; large Eggs of Emmets, a dram. Pound the Eggs, and set 'em in the Sun for a Day or two; then mix all in the Form of a Liniment; with which anoint the Nut of the Yard immediately before the Engagement. If the Erection continue after Enjoyment, wash the Yard with warm Water.

The Spirit or Juice of Ants with Civet and Oil of Pepper or Castor, the Root of black Hellebor or of Pellitory of *Spain*, pouder'd and mix'd with the Fat of a Quail; and Wine in which Euphorbium and Pellitory of *Spain* have been boil'd; are all recommended for the same use.

Take of Civet, eight grains; Ambergrise, six grains; Mosch, five grains; distill'd Oil of Cinnamon, eight drops; distill'd Oil of Nutmegs, four drops; Balsam of *Peru* as much as sufficeth for a Consistence. Mix and anoint the Perinæum and and Nut of the Yard.

CHAP. II.

Of the immoderat Erection of the Yard.

THis proceeds from the Contraction of the Muscles at the Root of the Yard, hindring the Recess of the Blood, which may be occasion'd two ways; 1. When the Redundancy and Turgescence of the seminal Liquor irritats to a perpetual Erection, and Desire of Venery, which for the most part ceases after repeated injoyment. 2. When the Muscles are seiz'd with Convulsions, and the Erection is attended with Pain, exasperated by venereal Embraces, the Person being free of any inclination that way.

As for the first, *viz.* the Heat, Sharpness and Turgescence of the Seminal Liquor, 'tis occasion'd by a sedentary Life, high Feeding, use of Spices, or venereal Incentives, wanton Thoughts and Conversation, volatil sharp Purges, &c.

It' prognosticats fast Living, an universal Weakness, and a short Life. 'Tis cur'd by frequent Blood-letting, imploying the Mind, exercising the Body, Fasting, Watching; the continu'd use of Nitre and Spirit of Vitriol; or of Cam-

phyr, or of Sugar of Lead. Hempſeed is a proper Specific. Purſlain, Lettuce, Water-lillies, Vervain, Mint, Willow-twigs and leaves, &c. are of the ſame claſs.

Take of Hemp-ſeed, Melon-ſeeds, of each two drams; the four cold Seeds, of each a dram; Lettuce-water, Sorrel-water, and Water of the Flowers of Water-lillies, of each three ounces: make an Emulſion, and ſweeten it with Syrup of white Poppies.

Take of the Waters of Vine-leaves, and of Willow-leaves, of each an ounce and a half; dulcify'd Spirit of Vitriol, half a dram. Mix and ſweeten with pearled Sugar.

Take of the Phlegm of Vitriol, two drams; Tincture of Dazies, Tincture of Roſe-flowers, of each half a dram. Mix, &c.

Take of the Pouder of the Seeds of chaſt Lamb, depurated Nire, of each two drams; Camphyr, half a ſcruple; *Laudanum Opiatum*, ſix grains. Make a Pouder.

Let the Juices of Plantain, Nightſhade, Hemlock, Henbane and Comfrey, be mix'd with diſtill'd Vinegar and Sugar of Lead, and applied to the Cod and Sharebone. Or, make Cataplaſms of the ſame Ingredients with Vinegar. Let the Juice of Comfrey or of Lettuce, in which Nitre is diſſolv'd, be applied to the Stones, Loins, and all round the Genital Parts.

As touching the ſecond, *viz.* The Convulſion of the Muſcles cauſing a *Priapiſmus*, hindring the Reflux of the Blood, and imparting ſomewhat convulſive to the Yard; 'tis occaſion'd by the irritation of the Animal Spirits, whether by an internal or external Cauſe. Cantharides or other venereal Incentives, unſeaſonably and immoderatly us'd, frequently produce it.

If it be attended by violent Pain, it portends an Inflammation or Impoſtume in the Part, or the Convulſions of other Parts.

As for the Method of Cure. Vomits are more proper than Purgatives, by reaſon that the latter frequently prove Incentives to Venery. After Vomiting let vitriolic and nitrous Acids be exhibited. The Decoction of Lentils with the Seed of the chaſt Tree, is applauded by *Lindanus*. Opium and Camphyr, with the Juice of Citrons; diaphoretic Gold, Rue, Mint, &c. are much in uſe. If it proceed from the uſe of Cantharides, Milk is not improper.

Let the Perinæum be anointed with Oil of Rue, or of Mint, or fomented with Wine, in which Rue and Cumminſeeds

seeds have been boil'd; or apply Cataplasms of Mint, Rue, Flowers of Water-lillies, Vinegar and Water: Or, anoint with Camphyr dissolv'd in Oil of Sweet Almonds, or in Vinegar. Vitriolic and nitrous Liquors are proper for the same use.

CHAP. III.

Of the Depravation of the Erection of the Yard.

THE Erection of the Yard is deprav'd when it stands away, or departs from the natural Posture. If the Bridle be short, it stands crooked; but that is cur'd by cutting the Bridle. If the Depravation proceed from the Inflammation of the Yard, 'tis cur'd by emollient Cataplasms, such as we prescrib'd for the Inflammation of the Testicles. Sometimes Erection is hindred by a Pain in the Yard, occasion'd by frequent Venery; which is cur'd by thrusting into the Passage Balsam of *Peru*, or the Leaves of Hemlock bruis'd. If the Pain be caus'd by a Stone in the Bladder, there is nothing better than to put the Yard into the Water of the Whites of Eggs With Woman's Milk and Camphyr.

The remaining Causes which disturb the Erection of the Yard are those relating to the Fore-skin. They are of two sorts; 1. When the Prepuce imprisons and straitens the Nut, and cannot be drawn back. This is call'd *Phimosis*. 2. When the Prepuce being drawn off, cannot be brought to cover the Nut again. This is call'd *Paraphimosis*.

As for the first, if the Prepuce be naturally so strait, it ought to be cut, but so as to avoid the Vein that runs along its side. If it proceed from the accidental Corrugation of the Prepuce, let the Cream of Quick-lime be beaten up with fresh Butter, and applied to it. If it proceed from an Inflammation occasion'd by the Embraces of a foul Woman, foment the Prepuce and Nut with the following Mixture.

Take of the Mucilages of Fleawort-seeds, of Quince-seeds, of Fenugrec-seeds, extracted with Plantain-water, of each an ounce; the Yelk of one Egg; and three ounces of Cows-milk. Mix, *&c.* Or,

Foment with the Water or Decoction of Quick-lime, warm; if you please you may add to it Sugar of Lead, or sweet Mercury.

Take of Chamomile and Elder-flowers, of each a handful; Henbane-flowers, Aniſeeds, and Fennel-ſeeds, of each half a handful; Bay-berries, half an ounce. Cut, bruiſe, and boil them in Lime-water; and apply the hot ſtrain'd Liquor to the Part. Or make a Cataplaſm of the Meal of Beans with Lime-water for the ſame uſe.

As for a *Pharaphimoſis*, 'tis occaſion'd for the moſt part by the firſt Venereal Encounter; and is often-times accompany'd by a Swelling of the Prepuce. Upon which account ſoftning and diſcuſſing Ingredients ought to be joyn'd together.

Take of the Leaves of Marſh-mallows, common Mallows, and Pellitory of the Wall, of each a handful; Marſh-mallow-roots and white Lilly-roots, of each an ounce; Flowers of red Roſes, and Flowers of Chamomil, of each two little handfuls. Boil them in Milk to the Conſiſtence of a Pultiſe, and apply to the Part. Flowers of Chamomil, or of Elder, or of Henbane, may be boil'd in Milk or Lime-water, for a Fomentation. Or apply a Cataplaſm of white Bread, Yelks of Eggs, Oil of Roſes and Saffron: For if the Pain be violent, Saffron ought always to be added.

AN

AN ABRIDGMENT OF ETMULLERUS HIS *Practice of* PHYSIC, *&c.*

BOOK IV.

Of Diseases peculiar to Women.

SECT. I.

Of the Disorders of the Menstrual Flux.

THE most notable Alteration which happens to Women when they are ripe for Mens Embraces, is the monthly Evacuation of Blood by the secret Parts, beginning ordinarily in the fourteenth Year of Age, and ending in the forty ninth; tho' sometimes it anticipates the former, and out-lives the latter Date.

This Flux is call'd the Terms or Courses, and returns duly once a Month, in some a few Days sooner, and in others so much later; only Child-bearing Women, and sometimes such as give suck are not liable to it.

It is caus'd by an extraordinary Fermentation and Rarefaction of the Mass of Blood, occasion'd by a peculiar fermentative Power of the Glands of the Womb; whence being incapable to be contain'd within its ordinary bounds,

it breaks forth at the Arteries of the *Vagina*; and the Quantity being thus leſſen'd, in the ſpace of three or four Days, the Fermentation ceaſes till the next period.

This monthly Purgation is diſorder'd in the way of deficiency, increaſe, or depravation.

CHAP. I.

Of the Deficiency of the Terms.

THis is commonly but improperly call'd a Suppreſſion o the Terms, and is occaſion'd either by a Defect in the Blood, or in the Womb and Veſſels through which it flows. The Fault of the Blood is its groſſneſs, toughneſs and fix'd acidity, proceeding from the Diſorder of the Stomac, whereby it becomes unfit for a due fermentative Expanſion.

Sometimes the Veſſels of the *Vagina* are obſtructed by a viſcid Phlegm; and ſometimes the ſides of the *Vagina* being exulcerated, or otherwiſe hurt, grow together, in which caſes the wonted Flux is deficient.

The remoter Cauſes are cold, whereby the Blood is coagulated, Food of difficult Digeſtion, uſe of Acids; and finally, ſuch Affections of the Mind as naturally cool and thicken the Blood, ſuch as ſudden Frights, Sadneſs, Grief, and the like.

If this Diſeaſe is from the Blood, the ſtretching Pains of the Loins, the Pulſation of the Arteries of the Loins, and thoſe about the *Os ſacrum*, the ordinary Fore-runners of this Flux, are abſent; the Urine is crude, the Belly coſtive, hypochondriac Symptoms prevail, and in time no ſtated periodical Alteration of Body is to be perceiv'd.

But if from the Womb, and its obſtructed Veſſels, the Symptoms abſent in the former caſe are preſent here, and that in a higher degree; with wearineſs of the Joints, pricking Pains of the Loins, Blood iſſuing from other Parts of the Body, and that at ſuch times as the Courſes uſed to flow.

But the greateſt Difficulty is to diſtinguiſh this preternatural State, from the natural Suppreſſion of the Terms by impregnation, which is accompanied with almoſt the ſame Symptoms.

However, we may conclude, that the Suppreſſion is preternatural, if the Patient grows ſtill worſe and worſe, with an univerſal Paloneſs covering the whole Body, and decay of Appetite continuing beyond the third Month; if there are continu'd

tinu'd Pains of the Head, unusual Beatings of the Arteries, especially in the Loins, frequent Vicissitudes of Heat and Cold all over the Body, Difficulty of Breathing, especially on every slight Motion of the Body, a frequent unequal obscure Pulse; and in fine if the Urine is either thinner, paler, or higher colour'd than ordinary.

If this Suppression happens in the very time of the Flux, the Cure is easie, if timely and speedy; but if the Suppression be of an earlier date, it is more slowly and difficultly cured, and oftentimes brings on divers other Diseases, such as Cachexies, Dropsies, various Ulcers of the Parts, Asthma's, Disorders of the Stomac, Melancholy, &c. and at length Death it self. Black Urine in this Disease is a good sign.

In the cure of this Distemper we must endeavour, 1. To rectifie the Chylification of the Ventricle, by Vomits and aromatic volatil Medicines. 2. To amend the Crudity of the Blood by chalybeat Medicines, and volatil oily Aromatics. 3. To remove that Viscidity of the Humours which obstructs the Vessels of the Womb; by exhibiting Gums, and particularly Gum-ammoniac, as also Mercurials, especially *Mercurius Dulcis*; and above all, such Specifics as are known to excite the monthly Fermentation of the Blood.

But to be more particular; 1. Specifics are never to be given, when the Distemper is confirm'd, before the universal Evacuations.

2. Before we provoke the Courses, we ought to consider whether it be expedient; for in such as are emaciated, newly recovered from sickness, or who have never had them, it is not to be attempted.

3. At such time only the Terms are to be mov'd, as otherwise naturally they would have flowed of their own accord.

4. Of universal Remedies, the chief are such as evacuate, whether upward or downward, and next the opening of a Vein. Vomits, whether prepar'd from Antimony or Asarabecca, given in the beginning of the Cure, yea sometimes repeated, are of excellent Virtue; but digestives must be premis'd. As,

Take of *Mynsicht*'s *Arcanum Duplicatum*, half a dram; chachectic Crocus of Steel, two scruples, with half a scruple of Salt of Tartar. Mix 'em, and make a Powder to be divided into two parts.

In

In the next place ſtrong Purgatives may be given, ſuch as Coloquintida and black Hellebor, of which, together with Alteratives, divers Compoſitions may be made up. As,

Take Gum-ammoniac diſſolv'd in Vinegar and thicken'd, Extract of black Hellebor, of each fifteen grains; Caſtor and Extract of Saffron, of each three grains; Troches Alhandal two or three grains. Make Pills with Oil of Turpentine or Amber. Or;

Take of the Maſs of Pills of Hiera with Agaric, and *Mercurius Dulcis* rightly prepar'd, of each fifteen grains; of the Extract of Troches Alhandal, two or three grains; and make Pills with Eſſence of Caſtor.

Of theſe, and ſuch like, let the Patient take a Doſe every four or five Days; and in the Intervals, let Bags of alterative Aromatics be infus'd in Wine. As,

Take Roots of Angelica and Lovage, or Spignel, of each an ounce; of Galangal, half an ounce; Leaves of Roſemary, Fever-few, Savin, of each a handful; Bay-berries or freſh Juniper-berries, an ounce and a half; Cinnamon, three Drams; Mace, a dram; Saffron, as much; Salt of Tartar, three drams: cut, bruiſe, and tie them in a Bag to be infus'd in Wine, of which take a Draught in the Morning faſting, and two Hours before Supper. Or,

Take Leaves of Mugwort, Pennyroyal and Roſemary, of each a handful; Roots of Angelica, ſix drams; Cinnamon, two drams; Saffron, a dram: cut, bruiſe and tye them in a Bag to be infus'd in two Meaſures of Rheniſh Wine, wherein red hot Steel has been ſeveral times quench'd.

5. The Body being thus prepared, Bleeding will be very expedient, unleſs the Patient have never yet had her Courſes, in which caſe Bathing will ſuffice. If the Terms do already flow but ſparingly, you may open the Saphæna in the Leg; as alſo if there is reaſon to fear they will not come at their wonted time; but if the Flux is at hand, and you deſire to facilitate it, then you may open a Vein in the Arm. Theſe Univerſals being premis'd, we muſt proceed to correct the Complexion of the Blood; to which purpoſe Steel and chalybeat Medicines are of great force, ſuch as all cachectic Pouders, Earths, Infuſions and Extracts prepar'd from Steel, yea crude Filings of Steel, if the Stomac be ſtrong. Or,

Take of the Filings of Steel, two ounces; with one ounce of Cinnamon, infuſe them in Wine, whereof take a good Draught Morning and Evening before Meals.

Spaw-

Spaw-waters drunk, are very profitable.

Together with these you must use the volatil bitter Aromatics, especially such as are also specific Movers of the Terms, as well internal as external, such as Rosemary, Calamint, Chervil, Lovage, Fever-few, Lesser Centory, Horehound, Savine, Wall-flowers, Flowers of Marygold and Lavender; seeds abounding with a volatil Salt, or of a sharp aromatic Taste; as those of Rocket, Cresses, Fennel, Anise, &c. Juniper and Bay-berries, Roots of Angelica, Fennel, Sea-holly, Briony, Madder, round-rooted Birthwort, Gentian, Elecampane, &c. Also Mugwort, Baum, Gentian, Cinnamon, *Cassia Lignea*, Galangal, Nutmegs, Cardamoms, Myrrh and its Essence, *Elixir Proprietatis*, compound Tincture of Tartar, all Preparations of Myrrh, Gums, Coloquintida, Castor, Saffron, Milt of an Ox, Borace, alcalin Salts, rather volatil than fix'd; Also *Mynsicht's Arcanum Duplicatum*, &c. Of which almost an infinity of Prescriptions may be made. We shall single out only a few for example's sake. As,

Take four ounces of Nutmegs, and mix'em well with twelve ounces of fine Sugar, and take the bigness of a Walnut Morning and Evening. Or,

Take two drams of Castor, volatil Salt of Amber and Hartshorn, of each a dram; infuse them in a sufficient quantity of Spirit of Wine, diluted with Cinnamon-water, in a warm place, in a close Vessel, till the Tincture is drawn; of which give a dram.

Take *Zwelfer's* Tincture of Vitriol of Steel, or its Solution with Spirit of Wine, two drams; Essence of Castor and Saffron, of each a dram. Dose, from forty to sixty drops; twice or thrice a Day in some hot Liquor: But withal, let the Patient moderatly exercise her self.

Take Solution of Steel with Juice of Apples, compound Essence of an Ox's Milt, and that of Savine, of each two drams. Or,

Take Essence of Castor, two drams; Quintessence of Rosemary, Spirit of Sal-armoniac with Amber of each a dram. Or,

Take Borace, a dram; Myrrh, half a dram; Saffron, fifteen grains. Make a Pouder for three Doses. Or,

Take *Mynsicht's Arcanum Duplicatum*, four scruples; Castor, half a dram; Myrrh, a scruple; Saffron, half a scruple. Make a Pouder for four Doses.

For a Vehicle to such Pouders, take a spoonful of this Mixture.

Take

Take of Mugwort-water, two ounces; Cinnamon-water, one ounce; Eſſence of an Ox's Milt, three drams; Eſſence of Caſtor, a dram; Syrup of Canel, ſix drams.

If the Suppreſſion of the Terms be from the default of the Womb, the obſtructed Veſſels are to be opened by volatil penetrating Medicines mix'd with Sudorifics. Sometimes manual Operation is requir'd.

If by a ſudden Cold, or ſuch other Cauſe, the flowing Courſes are ſtopp'd, let Blood at the Saphæna; and then let volatil oily Aromatics be given, which with a ſoft breathing Sweat will reſtore the natural Motion of the Blood; ſuch are Spirit of Sal-armoniac, and the volatil oily Salts. *Sperma Ceti* may be given to a dram with Caſtor, in hot Ale; as alſo ſome fix'd Salt, as that of Wormwood or Savine. If a grievous Pain moleſt the Womb, the Decoction of Chamomile, with the other above-mention'd Ingredients, may be given inwardly; and what remains after ſtraining, may be apply'd to the Groin in the form of a Cataplaſm.

But if by ſudden Fear, Anger or ſuch like, the Flux is reſtrain'd; firſt open a Vein in the Foot, then give the Spirit of Sal-armoniac twice or thrice a Day. Or,

Take of the Decoction of Chamomile-flowers, three ounces; to which add of ſimple Oxymel, one or two ounces.

To theſe internal Remedies, Externals may be added, ſuch as Fomentations, Baths, Fumigations, *&c.* They are us'd after opening a Vein in the Arm, at what time the Courſes are expected. They are prepared of common emollient, or proper aromatic Ingredients, ſuch as Savine, Feverfew, Mugwort, *&c.* As,

Take Leaves of Mugwort, Pennyroyal, Wild-time, of each two handfuls; Savine, Flowers of Chamomile, white Lillies, of each a handful; Roots of Marſhmallows, round-rooted Birthwort, Madder, of each two ounces; Roots of Angelica, an ounce; Juniper and Bayberries, of each ſix drams; Salt of Tartar, ſix ounces. Mix them for a Bath. Or,

Take Leaves of Savine, half a handful; Myrrh, two drams; Wood of Aloes, a dram; Troches Alhandal, a dram: Make a groſs Pouder, to be thrown on burning Coals, that the Smoak may be received by the Womb.

The Ancients us'd Peſſaries, among which that made of the Gall of a Bull mix'd with the Juice of Mercury, wherein Coloquintida has been boil'd, is not unprofitable; Garlick alſo, and its Heads beaten with the Oil of Spike, may be uſed to this purpoſe.

If

If the Evil is very ſtubborn, we are ſometimes forc'd to uſe Cantharides both inwardly and outwardly.

CHAP. II.

Of the immoderate Flux of the Terms.

IF the Courſes flow oftner, or in greater quantities than they ought naturally to do, 'tis call'd an immoderat Flux of the Terms.

In thoſe who labour of this Diſtemper, we may obſerve three things; 1. The Strength of the Stomac is impaired with a dejection of Appetite. 2. They feel for the moſt part a ſtretching and tearing Pain in the Back about the Loyns. 3. Thoſe who are ſcorbutic, abounding with a volatil Acid, are for the moſt part ſubject to it.

The Cauſes reſpect either the Womb or Blood. Sometimes the former loſes its due firmneſs or tone, and does not ſufficiently ſtrengthen and extend its Veſſels; ſometimes the Orifices of its Veſſels are over-dilated or broke open by force; as by over-ſtraining ones ſelf in taking up great Weights, hard Labour, Sneezing, Vomiting, &c.

But moſt frequently the Cauſe is in the Blood, either when it is too wateriſh; or when its Serum does too much abound with a ſaltiſh Acidity, or Acrimony; or elſe, when it is too much moved and heated by venereal Rage, Exerciſe, Joy, Anger, uſe of ſtrong Liquors, Aromatics, or too hot a Seaſon, &c.

If the evacuated Blood is thin, of a florid and brisk Colour, or if, when receiv'd on a Linnen-cloth, it diſcovers a pale Circle, the Seroſity of the Blood is the Cauſe; but if the Patient perceives a gnawing, biting, itching Pain, twitching as it were the Genitals, with a deſire of Evacuation; then the Acrimony of the Serum offends: But if the voided Blood eaſily clots, and retains the natural Colour, being ſomewhat obſcure; and if withal, the Cheeks are ruddy, Veins ſwollen, the Pulſe great, quick and frequent, then the Fault lies in the over-heating, or fermentative irritation of the Blood.

This Evil is dangerous if it continues long; for it occaſions a Weakneſs, Indigeſtion, Cachexy, Swelling of the Feet, Dropſie, the Whites: and if the Patient is in Years, it is for the moſt part incurable.

In

In the Cure we muſt indeavour three things; 1. Either to diminiſh the Blood by Faſting, Labour, or Blood-letting or to alter it with Wormwood, Rhubarb, &c. or to allay its Fervour and Fermentation, by Plantain, Purſlain, and mild Acids. 2. To check its Fluidity with things that thicken and allay its ſharp Seroſity with Chalybeat and abſorbent Medicines. 3. To ſtrengthen the Womb and its Veſſels, with Aſtringent and chiefly Martial Remedies.

Now with regard to theſe Indications, we muſt obſerve 1. That a Flux of any conſiderable ſtanding muſt not be ſtop'd of a ſudden.

2. The Diet muſt be well order'd, the Patient muſt be kept warm, with reſt of Body and Mind; her Drink muſt be warm, and ſhe ought to abſtain from Wine.

3. Mild Purgatives, and ſuch as leave ſome aſtriction behind them, may be uſed before the Flux, when a ſuperfluous Seroſity abounds; as a dram of Rhubarb mix'd with Conſerve of Roſes, or Syrup of Quinces; alſo Myrobalans. Or,

Take Pouder of choice Rubarb a dram; Marmalad of Quinces half an ounce; Plantain-water an ounce; Mix for a draught.

4. Bleeding increaſes the Diſorder, and ought not to be us'd; but inſtead of it, if the Blood is wateriſh, you may have recourſe to Sudorifics and Diuretics.

5. Opiats are of ſingular uſe in preventing and curing the Paroxyſm: but ſpecial regard muſt be had to the Patient's Strength.

Remedies therefore in this Diſeaſe are either abſorbent, or allaying, in regard of the Blood, or aſtringent with reſpect to the Womb. The Oyl and Spirit of Vitriol, given in Plantane-water, does notably allay the ardour of the Blood; as alſo prepar'd Nitre, *Lapis prunellæ*, and mild acid Aſtringents.

As for Aſtringents which thicken the Blood, and correct its Fluidity: Theſe are Plantane, Purſlain, Shepherds Purſe, Nettles, white flower'd Yarrow, and chiefly their Juices; the Moſs of the wild Plum-tree, and that of the Oak, (given to a dram twice or thrice in potch'd Egg) Looſtrife with a purple Flower, the greater Comfrey and its Root, the Root of Biſtort, Nutmegs, Rinds of bitter Oranges, and their Decoction; the Bark of the Root of the Mulberry-tree, Rinds of Pomegranats, and their Flowers; Poppy and Henbane-ſeeds, Pears, Services, Quinces, Medlars, Maſtic, and

Wood

Wood of the Maſtic-tree; Miſletoe of the Oak, Steel and Chalybeat Remedies, Coral and its Preparations, Allum, Bole-Armenic, ſeal'd Earth, Amber, Dragons Blood, the Dung of an Aſs, Gooſe, or Dog, the Yelk of an Egg, burnt Hartſhorn, *&c.* Of theſe, and ſuch like, many forms may be preſcrib'd. As,

Take red Coral prepar'd, yellow Amber, Bole-Armenic, Dragons Blood, of each two drams; Plantain-ſeed, calcin'd Borace, of each a dram; *Laudanum Opiatum* ſix grains; *Hartman*'s Extract of Saffron a ſcruple. Make a Pouder, which is of excellent uſe when the Diſeaſe proceeds from watry Blood.

Take Conſerve of Roſes vitriolated an ounce; burnt Hartſhorn prepar'd, Blood-ſtone prepar'd, of each a dram; Allum prepar'd with Sugar, twelve grains; *Laudanum Opiatum* two grains. Make an Electuary with the Syrup of acid Pomgranates, which is excellent in all Bleedings of the Womb. Or,

Take Water of Frogs Spawn, and of Oak-leaves, of each ſix drams; prepar'd Bloodſtone two ſcruples; Moſs of human Scull a ſcruple; Syrup of Myrtles three drams. But it is in vain to multiply Preſcriptions, which any one may vary at his Pleaſure.

Externals may likewiſe be us'd. Some hang a Jaſper about the Neck: Some a Toad kill'd and dry'd: A Peſſary may be made of Aſſes and Hogs Dung with Juice of Plantane, and and the Mucilage of Quince-ſeed. Injections for the Womb may be made of the Decoctions of ſimple Aſtringents, or their Juices, with addition of Allum.

If a grievous Pain and ſenſe of burning moleſt the Vagina, Henbane and Poppy-ſeeds may be added to Aſtringents.

Some order a Woman to put on a Shift that has been for eight days worn by a Man, and add, that by ſo doing, ſhe runs the riſque of never having her Terms again.

Some commend Cataplaſms. As,

Take of Carpenters Ruddle, Bloodſtone, and dulcify'd Earth of Vitriol, with red Bole, of each equal Parts: Mix them into a Cataplaſm with Whites of Eggs and Vinegar, to be apply'd to the Belly, and particularly the Region of the Groin.

Natural hot Baths are excellent, if the Evil is inveterat.

Some alſo have found much good by fomenting the Region of the Groin with a Spunge dipp'd in the Decoction of Allum, either alone, or with the Addition of Knotgraſs, Roots of Biſtort, and the like.

CHAP.

CHAP. III.

Of the Depravation of the Menſtrual Flux.

WE ſhall caſt into this Head ſeveral Accidents and Defaults of this Flux, and treat of 'em in the following Articles.

ART. I.

Of the Difficulty of the Terms.

TO Women of a foul and cacochymic Body, it often happens that a Day or two before their Courſes are upon them, and ſometimes when they begin to flow, they are afflicted with Head-aches, pricking and grievous Pains of the Stomac, beating and ſhooting Pains of the Loins, reaching ſometimes to the Groin; alſo Pains in the Belly, Palpitation of the Heart, Difficulty of Breathing; which Symptoms either ceaſe, or at leaſt diminiſh, when the Terms come; and when theſe are over, the others diſappear.

Theſe Pains proceed from the Veſſels of the outer Neck of the Womb, which either being too full, or ſtopp'd up by the foregoing Flux, hinder the diſcharge of the fermenting Blood. Moreover, in thoſe of an ill Habit of Body, Wind coming from the vitiated Bile, and pancreatic Juice, and paſſing from the Guts to the Meſentery, occaſions Spaſms and Contractions of the Nerves and Membranes, whence inſue the racking Pains reſembling thoſe of the Cholic.

This Diſtemper, if not timely prevented, ends in a total Suppreſſion of the Terms; ſometimes diſmal hyſteric, and other bad Symptoms enſue.

In order to adjuſt the Cure, we muſt endeavour to rectifie the vitiated Craſis of the Blood by chalybeat and aromatic volatil Remedies, with the addition of gentle Laxatives.

In the Paroxyſm the Fermentation of the Blood ſhould be promoted by volatil Aromatics, the Effervеſcence of the Bile and pancreatic Juice ſhould be reſtrain'd by chalybeat Medicines, and fix'd Acids.

In the Paroxyſm, let gentle looſening Clyſters with Turpentine be injected; then exhibit the compound Eſſence of an Ox's Milt, either alone or with the liquid Eſſence of Steel; to which may be added, Eſſence of Saffron: alſo

Elixir

Elixir Proprietatis, compound Tincture of Tartar, distill'd Oil of Aniseed, or that of Amber. Or,

Take Pennyroyal-water, two ounces; Water of Mugwort, half an ounce; Essence of Castor, a dram and a half; Spirit of Sal-armoniac, half a dram; distill'd Oil of Aniseed, three drops; Syrup of Mugwort, six drams. Mix and make a Potion.

If eight Days before the flowing of the Terms, an alterative and laxative Bag be given in Wine, the following hysteric Pills will effect the Cure.

Take of Aloe, three drams; best Myrrh, a scruple; Extracts of *Calamus Aromaticus*, and *Carduus Benedictus*, of each half a scruple; of Saffron, three grains; of Roots of Gentian, round-rooted Birthwort and Dittany, of each five grains. With Essence of Myrrh make Pills, to be given during the time of the Flux, from half a dram to a whole one, for some Days.

Sweet things ought to be avoided; but the following Potion to be taken by spoonfuls, is of singular efficacy.

Take Water of Swallows with Castor, an ounce and a half; Carminative-water, an ounce; Water of Pennyroyal, half an ounce; *Sperma Ceti*, a dram; Crabs-eyes prepar'd, a scruple; diaphoretic Antimony, half a scruple; volatil Salt of Amber, eight grains; Syrup of Cinnamon, six drams. Mix them.

If the Symptoms are very pressing, we must have recourse to *Laudanum Opiatum*; but always remember to mix it with such Ingredients as provoke the Courses.

If the Courses are at hand, or begin to flow, a Vein may be open'd in the Foot: if they are not look'd for, till after some Days, Blood may be taken from the Arm.

Externally such things as are prescrib'd in the convulsive cholic and hysteric Passion, may be us'd: Also this Fomentation.

Take of Bay-leaves, Wormwood, of each two handfuls; Pennyroyal a handful; Flowers of Roman Chamomil and Elder, of each half a handful; Roots of Angelica and Lovage, of each two ounces; Bay-berries, an ounce; Juniper-berries, half an ounce; the four greater cold Seeds, of each two drams; cut, bruise, and boil them with a sufficient quantity of Wine in a close stopp'd Vessel.

ART. II.

Of the leſſer quantity of the monthly Flux.

SOmetimes the viſcous Toughneſs of the Blood proceeding from a default in Chylification, is ſuch, that the Terms flow too ſparingly; upon which inſues a Palpitation of the Heart, Difficulty of Breathing, and a beating Pain about the Loins.

In curing this we muſt ſtrive to provoke the Courſes by all ſuch ſpecific Remedies as were order'd for the cure of their Suppreſſion; ſuch as half a dram of *Venetian* Borace, with ſome drops of Eſſence of Saffron, given in Pennyroyal or Cinnamon-water; alſo the Decoction of Savine, its Extract and Oil, Myrrh, Caſtor, volatil Salt of Amber, and the like.

Blood may be drawn forth from the Foot; Cupping-glaſſes, with Scarification, may be applied to the Legs or Thighs; Fomentations of emollient Ingredients mix'd with ſuch as provoke the Terms, may likewiſe be us'd upon occaſion.

ART. III.

Of the Flux of the Terms by drops.

IF there's an Acrimony in the Blood with toughneſs and thickneſs, or if the Paſſages and Veſſels be narrow, there follows a dropping Flux of the Terms, which is either continual, or laſts every Period much longer than it ought, ending ſometimes in an exulceration of the Womb. If the Blood is groſs and thick, 'tis a ſtubborn Evil.

This is cured in like manner as the immoderat Flux.

Steel and chalybeat Medicines are the top Medicines for compaſſing the Cure; alſo looſning and alterative Bags, with hyſteric Ingredients, may be uſed with good ſucceſs.

If the Vagina is excoriated, vulnerary Injections will be convenient.

ART. IV.

Of ſeveral other Diſorders relating to the Terms.

SOmetimes the Courſes have not their due Colour, but are either watry-colour'd, whitiſh, livid, yellowiſh, black, or

or ting'd with divers ugly Colours; all which proceed from the ill Disposition of the Blood and Chyle; to cure which after a Vomit, let chalybeat Remedies, Aloe, Myrrh and Saffron, or compound Tincture of Tartar be given.

If the Smell of the Menstrual Blood offend by reason of the Putrefaction begun in the Womb-Vessels, occasion'd by its sluggish Motion there, we must endeavour to restore its usual swiftness. Myrrh, Saffron, *Elixir Proprietatis*, compound Tincture of Tartar, Essence of Myrrh, Amber, and its Essence, Balsam of Sulphur with Turpentine, Preparations of Aloe with *Mercurius Dulcis*, do notably answer this Design.

If the Courses come sooner or later than ordinary, or observe no certain period, then the Crasis of the Blood is perverted, and the Genitals are notably infeebled.

This Distemper is always a Fore-runner of a Cachexy, and ends either in a total Suppression, or a Dropsie.

Steel and Coral, and the noble Medicines prepar'd from them, accomplish the Cure. But we must continue for some time in the use of them; joining such things as either promote or retard the Flux, as occasion shall require. Of Steel we have its Crocus's and Essences, artificial Spaws, artificial Vitriol of Mars, *Poterius*'s Pills, *&c.* From Coral we have its Sublimation with Sal-armoniac, and its Precipitat and Tincture: To all which we may add sometimes stimulating Aromatics, as Cinnamon, Myrrh, Saffron, *&c.* sometimes retarding Opiats; and sometimes Purifiers of the Blood, such as Fumitory, Germander, Monks Rhubarb, Lesser Centory, black Hellebor, and such like.

If the hypogastric Vessels terminating in the outer Neck of the Womb, be naturally mishapen, or misplac'd, or deprav'd, by any supervening Obstruction, and accordingly deny egress to the fermenting boiling Blood, it forces its passage through other Parts of the Body; such as the Eyes, Mouth, Nose, Breast, Navel, *&c.* and that either with or without order of time.

In curing this Disorder, regard being had to the sound or cachectic Disposition of Body, we must endeavour not to suppress the Flux, but bring it to the natural place.

Internals are of little use in the Paroxysm, but out of it volatil Aromatics may be us'd to open the obstructed Vessels.

When the Flux is at hand, the Saphæna may be opened; also Cupping-glasses may be apply'd to the Groin, to the Calfs of the Legs, and Insides of the Thighs, sometimes with and

ſometimes without Scarification, in order to turn the force of the Blood to the lower Parts: bathing of the Feet is alſo uſeful.

To open the Veſſels of the Womb, external Fomentations may be apply'd to it; Fumigations of Coloquintida, Peſſaries with Hellebor, Aloe, and ſuch like, may be us'd: ſharp Clyſters are likewiſe not to be omitted: Or the Decoction of Pennyroyal, Camomil, Savin, with Coloquintida, may be injected into the Womb.

And thus much ſhall ſuffice for the Diſorders of the Terms.

CHAP. II.

Of the white Flux in Women.

THis Diſeaſe being ally'd to the former, ſhall have place in this Chapter.

The external Neck, or Vagina of the Womb, is a glandulous Membran, whoſe confus'd Glandules every where open into its Cavity, eſpecially two glandulous Prominences encompaſſing the Urinary Paſſage, which in time of coition emit a whitiſh Liquor ſomewhat thick and glutinous.

If the Matter of this genital Liquor is too copious, ſpirituous, or ſharp, or if the foreſaid Orifices are ſomewhat looſe and flaccid, there enſues a Flux of that ſeminal Liquor, that diſappears and returns by intervals.

This Flux is ſometimes inoffenſive to the Patient, as being but little and ſeldom; but if it continue long, it muſt be cured by diminiſhing or tempering the ſeminal Liquor, or by ſtraitning the over-looſe Parts. Two or three ounces of the Juice of Citrons or Lemmons, may be taken every Morning for a long time, to moderate the Heat and Acrimony of the Matter; alſo Turpentine taken in an Egg, or with the Yelk of an Egg mix'd with Willow-flower-water; but eſpecially the Decoction and Extract of the Flowers of the white flower'd dead Nettle, or the Infuſion of Clary in Ale. Externally we uſe aſtringent Baths and Fomentations.

But if through default of the Blood and Chyle, the Liquor ſeparated and collected by theſe Glandules becomes too ſharp, and either ſimply Salt, or tinctur'd with acidity; and if withal the Texture of this glandulous Membran is by frequent Runnings rendred looſe and flaccid; in this Caſe, I ſay, there follows a continual and much more copious Flux of a

serous Liquor of various Colours, as yellow, black or green, and sometimes of a noisom smell.

The Flux is accompany'd with Cachexies, loss of Appetite, swelling of the Feet, Belchings, Weakness, dulness of the venereal Appetite, *&c.* and often-times occasions Barrenness.

If it is of long continuance, the Cure is hard, especially in old Women; if the Matter is sharp, it causes Itchings, Burning, Exulcerations of the Genitals, Gangreens, and at length Death.

In curing this Distemper we must first retrieve the Chylification of the Stomach, by vomiting and stomachical Medicines. 2. Correct the cachectic Crudity of the Blood, partly by Steel, and partly by volatil Salts and Aromatics. 3. In particular we must resist the Disease with Specifics. And 4. repair the Injury done to the solid Parts with astringent and nervous Remedies.

Two scruples of the Pouder of Asarabacca-roots, given after the use of Digestives, is the choicest Vomit. Purgatives are of no use, but Sudorifics, as Guajacum, Sassafras, Juniper-wood, *&c.* and Diuretics, as Turpentin, *&c.* may fitly supply their room.

Take Turpentin wash'd in Rose-water, half an ounce; Pouders of red Coral and Bole-armenic, of each half a dram. Mix, and take it twice a Week fasting: 'tis an excellent Diuretic.

Rosemary is of noted efficacy, to which some add Leaves of Mint and Baum: also the Roots of Galangal, Cyperus, Avens, Marjoram, Clove-gilly-flowers, and their distill'd Oils; also vulnerary Herbs, as Ladies Mantle, Agrimony, *&c.*

Of Steel Medicines, the chief are Liquor *Martis Solaris*, Tincture of Steel with Tartar, its Solution in the Juice of Quinces, *&c.*

Internal Specifics for this Flux are such as allay the saltish Acid, dry up watry Humours, and leave some astriction behind; such are Misletoe of the Oak in Substance and Decoction; (the Decoction of the Pine-nut, with the Wood of this Misletoe is an admirable Remedy) drop Fern, Tormentil, *Solomon's* Seal, Angelica, and the like; Garden and wild Clary, us'd any way, for internal or external use, dead Nettle with the white Flower, its Water, Conserve or Decoction, Walnut-shells, white flower'd Millfoil, Fern-root, Melilot with the white Flower, Plantane, Horse-tail, white Daisie, Woods of Mastic, Guajacum and Sassafras, chalybeat Milk

mix'd with Bole-armenic, Shells of hatch'd Eggs, either crude or calcin'd, given to half a dram; the Bone of the Cuttle-fish, Jaw-bone of a Pike, River-crabs, Capons-head powder'd; burnt Cork, given to a dram; Amber and its Preparations, prepar'd Cryſtal, Pumice-ſtone crude or calcin'd, diaphoretic Antimony, feather'd Allum, *Oſteocolla*, the Pizzle of a Hart or Whale. Of theſe Ingredients various Receipts may be preſcrib'd. As,

Take *Oſteocolla* prepar'd, half an ounce; prepar'd Cryſtal and Jaw of a Pike, of each a dram: With the Conſerve of Roſemary-flowers make an Electuary to be taken twice or thrice a Day.

Take Walnut-ſhells, two drams; Aniſeed, a dram. Mix, and make a Pouder for four or five Doſes.

Among external Remedies, the Ointment of Clary is famous, *viz.* Take Clary and beat it up with Butter, let it ſtand ſometime to putrifie, then boil and ſtrain it; with this anoint from the Navel to the Groin, uſing it alſo by way of a Peſſary. Natural Baths are uſeful, as alſo artificial ones made with Quick-lime, Allum, Sage, Clary, Mugwort, Feverfew, &c. or the Injections of the Aſhes of Walnut-kernels with Wine. Some uſe Fumigations with Maſtic, Frankincenſe, Nutmeg, Amber, &c. Or convey the Smoak of Sage by a Pipe. Iſſues in the Thighs, Legs, and Shoulders, are of uſe to divert the Humours.

SECT. II.

Of the Diſorders of Women relating to the venereal Appetite.

CHAP. I.

Of the Loſs of Virginity.

IN the outer Neck of the Womb, behind the Urinary Paſſage, there is a tranſverſe Membrane plac'd, which if the Lips of the Privity be drawn aſide, reſembles a Creſcent with a Hole in the upper ſide; but when the Lips fall together, it has the appearance of three ſmall fleſhy Prominences like Myrtle-berries. In

In the Integrity of this Membrane, together with the straitness of the Vagina, does Virgin-Innocence consist; and Virginity is said to be lost, when by the admission of Man's Yard the former is violently broken, or loosened and distended, and the latter widened; tho' at the same time it may be violated by other means.

Tho' Virginity once lost can never be properly restor'd, yet an artificial one, aping the true, may be obtain'd by straitning the Genitals, and retrieving their natural Tone; which is effected by Baths and Fomentations prepar'd of Astringents, such as the Root of the greater Comfrey, Plantane, Ladies Mantle, Rob of Acacia, &c. to which Allum must still be added. As,

Take of Oak and Plantane-leaves, of each a handful; Root of the greater Comfrey, three ounces; Galls, an ounce; Allum, half an ounce; boil them in Water. This Decoction may be injected by a Syringe, or apply'd with a Spunge.

Moreover, if we frequently foment the great, soft, and flaggy Breasts of Women that have conceiv'd, with the distill'd Water of green Pine, and wash them with the same at Night, letting them dry of themselves, they will become little, round, and hard. Ladies Mantle, Feverfew and Clary, are also of use for this purpose.

That which provokes Virgins to forfeit their Title to the Angelical Character is Lust, which they begin to entertain about the Age of Fourteen, when the menstrual Flux commences.

CHAP. II.

Of the Depravation of the venereal Appetite.

THe venereal Appetite or Lust is nothing else but a tender Sense and Tickling of the extended Clitoris, caus'd by the influence of Seminal Matter abounding in the two glandulous Prominences, and other Glandules of the Vagina.

This according to Nature ought to be moderat; however it is sometimes deficient, and sometimes it exceeds.

The languishing of the venereal Appetite is frequently occasion'd by the Paucity of the Genital Liquor, and its want of Spirits, proceeding sometimes from another Disease, as the Scurvy, Whites, &c. But if this Appetite is altogether wanting, I am of opinion it is a Default in the Structure or Conformation of the Parts, and admits of no Cure.

As to the former, it is an Evil of little danger, ſave that it is ordinarily accompanied with Barrenneſs.

The want of Genital Liquor may be ſupplied by the uſe of juicy Food and volatil Aromatics, ſuch as Musk, Civet, and Amber. But if it is only the effect of other Cauſes, 'tis cur'd by their removal.

Externally foment with the Infuſions of Ants, together with their Neſt; and anoint the Groin and Privities with Oil of Ants, or with Aromatic Oils or Apoplectic Balſam mix'd with Civet and Musk.

If the ſeminal Humor contain'd in the glandulous Subſtance of the Vagina, either by too long retention, or otherwiſe, become ſharp, ſaltiſh, or ſomewhat acid, it excites ſometimes in the places through which it paſſes, ſuch an itching as diſturbs Sleep; it is ſometimes accompany'd with a deſire of Copulation, but oftner not.

In curing this, we muſt begin, if need be, with mild Laxatives and Sudorifics, and, if needful, allay the Acrimony of the Humour, and finiſh what remains by external Applications. The Internals are the Infuſions and Decoctions of Fumitory, Succory, Scabious, Baum, Penny-royal, Roots of Briony, Black Hellebor, Polypody, &c. *Mercurius dulcis*, and Troches Alhandal anſwer the purgative end, as the Eſſences of Elder, the Tincture of Coral, and the Spirit of Woods perform the alterative and diaphoretic Office.

Of Externals, the Preparations of Lead and Mercury are the beſt: ſuch as Vinegar wherein calcin'd Lead is diſſolv'd. If the Evil proves ſtubborn, anoint the Lips of the Privities with an Ointment made up of one part of Oil of Tobacco, and two of the Ointment of Tutty; or apply Bliſtering-plaiſters; or cut Iſſues in the Thighs.

Sometimes the acid Humour retain'd corrodes the Lips of the Privities, and occaſions Wheals, Puſhes, and in fine Scabs, which are of a mild Character, but very itching; but there are others call'd *Epinictides*, yet different from thoſe little painful ones that ſpring from foul Embraces. However both the one and the other are catching, and difficultly cur'd.

For Cure we muſt begin with ſuch Univerſals as are uſed againſt the Scab or Itch; eſpecially laxative Bags of the Root of Briony and Spurge: and if they are of the malignant kind, we muſt uſe Mercurial, and other Specifics for the Pox.

Exter-

Externally you may apply Oil of Roſes mixt with Yelks of Eggs, and diſcolour'd by beating in a leaden Mortar. Or,

Take of the Decoction of Quick-lime, one pound; Sugar of Lead, a dram. Inject one half, and foment with the other. If you ſuſpect Infection, inſtead of *Saccharum Saturni*, take a dram of *Mercurius dulcis*. Or,

Take of Aloe and Myrrh, of each the bigneſs of a ſmall Peaſe; Verdigrice, half as much; of white Wine, Roſe and Plantane-water, of each an ounce: Mix for Injection and external Waſhing.

You may alſo uſe *Unguentum Album Camphoratum*, or *de Litharg yrio* mix'd with Oil of Tartar *per Deliquium* in the mild ſort, and with *Mercurius dulcis* in the malignant ones.

If the venereal Appetite is exalted to the pitch of a *Delirium*, it is then call'd *furor Uterinus*, a Diſorder incident as well to Virgins, as married Women and Widows. Such Perſons are talkative and peeviſh; they ramble through the Streets, and ſolicit whoever they meet to Venery, and receive a denial with the higheſt Indignation; ſometimes wantonly uncover themſelves before Men, and interlard their incoherent Diſcourſes with Smut and Bawdry.

This Diſtemper at firſt is eaſily cur'd, but if neglected, ends in abſolute Madneſs: Wherefore in the beginning 'tis proper to exhibit a ſtrong Emetic, enjoin a ſpare Diet, and drain the Genital Liquor, by extinguiſhing Specifics, ſuch as are the Root of white Water-Lilly, *Agnus Caſtus*, chiefly its Seed; Lettuce, Rue, Purſlain, Hemlock, principally its Seed; Willow-leaves, the Liquor running from its ſmaller Branches lopt off in the Spring, Hemp and Poppy-ſeed, *&c.* Or,

Take Hemp-ſeed, two ounces; Seeds of Lettuce and Purſlain, of each two drams: Make an Emulſion with Purſlain-water, to be ſweetened with Syrup of Water-Lilly. If Camphyr or an Opiat be added, 'twill be more effectual.

The Effervеſcence of the Blood, and by conſequence the Turgeſcence of the Seminal Liquor, muſt likewiſe be repreſs'd by frequent Bleeding and abſorbent Acids, ſuch as the Juice of Citrons, Lemons and Pomegranats; Nitre, Sugar of Lead, Coral, *&c.* and alſo by mild Sudorifics: to all which, in order to put a ſtop to the Fury and impetuous Motion of the Animal Spirits, 'tis convenient to add Poppy-ſeed, Opium and Camphyr.

Externally we uſe Cataplaſms, Baths and Fomentations of Mandrake, Nightſhade, Purſlain, Rue, Hemlock, Poppy, and ſuch like.

SECT.

SECT. III.

Of the Diſorders of the whole Body, which are ſuppos'd to proceed from the Womb.

CHAP. I.

Of the Green Sickneſs.

AS the firſt arrival of Seminal Liquor occaſions ſeveral notable Alterations in Women; ſo if it is too long retain'd, and conſequently corrupted and altered, it ferments the Maſs of Blood, Juices and Spirits, introducing an evil Diſpoſition of the whole Body, called the Green Sickneſs, or White Virgin Fever; in which the Colour of the Skin is pale, or ſomewhat livid and ugly, attended by a blewiſh Circle under the Eyes, Anxiety and Sadneſs, without manifeſt cauſe; a ſlow, obſcure, and diſorderly Fever; an unequal and inconſtant Pulſe; Vomitings in the Day-time, &c. It only invades Virgins and Widows, or Women retir'd from Men; and is heedfully to be diſtinguiſh'd from the Cachexy or evil Diſpoſition of Body that's common to both Sexes.

It is difficult to be known: however, if no Error in Diet, or the Uſe of the ſix Nonnaturals; no Obſtruction of the Courſes, or other manifeſt Cauſe have preceded; or if the Patient of a forward brisk Maid is become ſad and anxious, or is a forlorn Widow, who formerly was a healthy Wife; we may in ſuch Caſes conclude this to be the Diſeaſe, which the older it is has the worſt Symptoms following it.

In curing of it we muſt endeavour to correct the Default of Genital Liquor, and remove the vitious Craſis of the Blood, and by proper Remedies cure the incident Symptoms.

For the former Intentions, Camphyr is a notable Remedy; it not only diminiſhes the quantity of Seminal Liquor, and amends its virulency, but has a peculiar Virtue of fortifying the Blood and Spirits. Amber alſo, Myrrh and its Eſſence prepar'd with Nitre, Caſtor, Spirit of Sal-armoniac, and all Remedies prepar'd from them, Preparations of Lead, and moderat Acids, are all proper. As,

Take of the Conſerve of Baum, an ounce and a half; Conſerve of Citron-Pulp, and of Quinces, of each ſix drams; Eſſence of Myrrh, half an ounce; prepar'd Amber, two drams;

drams; Cryſtal Mineral of Lead, Powder of Caſtor, of each a dram; Cloves, Mace, Zedoary, of each a ſcruple; Camphyr, half a ſcruple: Make an Electuary with Syrup of Pomegranats.

With theſe, ſuch things as extinguiſh the Seed may be mix'd, as *Agnus Caſtus*, Willow, Hemp; and poſſibly Turpentine may not be amiſs. Opiats allay the ſeverity of Symptoms, and may be mix'd with other Specifics. Bleeding, and that often repeated, is not improper.

CHAP. II.

Of a Cachexy in Women.

ANother Source of Diſeaſes, commonly term'd hyſteric, is the Suppreſſion of the Terms, from which a numerous Train of Evils proceed, eſpecially if it happens on a ſudden; by reaſon both of the quantity and deprav'd quality of the ſtagnating Blood: for when there is too great a quantity of Blood, its due Circulation, and fermentative Turgeſcence being reſtrain'd, it becomes leſs ſpirituous and volatil, yea groſs and viſcid, and as it were, flat and uſeleſs. And as touching its Quality, we ought to remember, that tho' all the Maſs of Blood is originally of the ſame condition and nature, yet that which by the monthly Fermentation is meaſur'd out to be expell'd, undergoes a ſingular Change in the Veſſels of the Womb, where it waits for Paſſage, and acquires a certain corroſive Acrimony, or aluminous Tincture.

Now from theſe Cauſes ſpring innumerable Miſchiefs, ſuch as Pleuriſies, Quinſies, Inflammations of the Womb, Epilepſies, unuſual Longings, Melancholy, Tumours and hard Swellings of the Womb and Spleen, ſtubborn Head-aches, Palpitations and Beatings, as well of the Heart as in the Back and Loins and under the ſhort Ribs; till at length the digeſtive Ferment of the Stomach, the Bile and pancreatic Juice being ſpoiled, evil Diſpoſitions of Body, Jaundice, Dropſies, and Conſumptions, and finally Death, creep in.

Now to obviate theſe Evils we muſt jointly carry on two Deſigns. 1. We muſt correct the vitious Craſis of the Blood and other Juices, particularly its auſtere Acidity: And, 2. Revive the monthly Fermentation of the Blood, that the Terms may flow as they ought. Theſe in general we may compaſs by Steel, and aromatic volatil Medi-

cines.

cines. But we muſt firſt of all give a Vomit, and repeat it if occaſion require: for this end we uſe Preparations of Antimony, which indeed are the beſt, *Aſarum*, Hellebor, &c. for example; two drams of Oxymel *Helleboratum Geſneri* for a Doſe. It is likewiſe convenient to purge with *Quercetanus* Pills of Tartar and Gum Ammoniac; or thoſe of Hiera with Agaric; or by adding to alterative Bags the Roots of Bryony, black Hellebor, and Coloquintida.

As for Calybeats we may uſe *Zwelfer*'s Tincture of Vitriol of *Mars*, Tincture of Steel prepar'd with Spirit of Sal Armoniack and Spirit of Wine, Aperitive Crocus's of *Mars* prepar'd with fix'd Salts, and ſuch like: alſo Wine or Decoctions of Roſemary impregnated with Steel, *Quercetanus* Cachectic Pouder, &c.

To theſe we join Aromatics and aperient Ingredients, eſpecially Saſſafras, Galangal, the greater hot Seeds, Juniper and Bay-berries: alſo the volatil Spirit of Tartar, and *Elixir Proprietatis* prepar'd without an Acid. The Specifics muſt be calculated according to the variety of Symptoms. An Epilepſie and convulſive Motions require Remedies from Cinnabar, Caſtor and Amber.

The Headach calls for the volatil Salts and Antiſcorbutics particularly the volatil Salt of Amber both internally and externally.

For Palpitations of the Heart we chooſe Remedies from Coral, chiefly it's Tincture; or the Pouder of Zedoar mix'd with prepar'd red Coral.

If a ſtopping of the Terms is followed by a melancolic *Delirium*, let Antimonial Emetics be repeated, and add the Spirit and Pouder of a human Secundine, to the incident Preſcriptions.

CHAP. III.

Of the Hyſteric Paſſion.

THO this Diſeaſe is accounted peculiar to Women, and to proceed from the Womb, yet it is found by experience to be common alſo to Men, and to be of the ſame Nature with their hypocondriac and ſcorbutical Diſtempers. It's Symptoms are as follows.

The Paroxyſm is uſher'd in with noiſe and murmurings in the Belly, and ſometimes the apprehenſion as it were of a Ball violently mov'd and toſs'd hither and thither, and riſing up

p gradually. It is always attended by a ſtretching or tear-
ng Pain under the ſhort Ribs; a plentiful breaking of Wind
pwards or downwards; frequent Yawnings and Stretchings;
arious and violent Pains in the Belly, either fix'd or float-
ng; proſtration of Appetite and Coſtiveneſs; a Vomiting
ometimes of a greeniſh or yellowiſh matter, of an acid or
trange Taſte; Palpitation of the Heart, with a ſmall, weak,
nd ſometimes intermitting Pulſe; Swooning, difficulty of
Breathing, and danger of Suffocation; giddineſs of the
Head, dimneſs of the Eyes; ſometimes frequent Laugh-
er, various kinds of *Deliriums*, Convulſions, ſtrange Motio-
ns of the Joints and whole Body; ſometimes a total Ceſſa-
ion of all the Senſes internal and external: for the moſt
part the beginning and increaſe of the Fit is accompanied
with coldneſs, ſucceeded in the declenſion with heat, ending
in a large Sweat.

This Diſeaſe proceeds from a vitious Effervescence in the Guts of a preternatural Acid, bred in the Stomach, *Pancreas*, or other Glandules, with the bilious Juice; whence the meſenteric Nerves being irritated, give riſe to the various Symptoms of the Abdomen. And the vitious Acid being carried into the Blood, occaſions alſo its Coagulation and Stagnation. To which we may join a diſorderly and diſturb'd Motion of the animal Spirits, eſpecially in the intercoſtal Nerve, and thoſe of the *Par vagum*, which ſpread the Diſorder all over the Body.

The Paroxyſms of this Diſeaſe are review'd ſometimes by violent Paſſions of the Mind, as Anger, a Fright, Grief; ſometimes by ſtrong Smells, whether from ſweet ſmelling things, as Muſk, Civet, Amber, Roſes, &c. as it frequently happens, or from fetid things, according to the peculiar temperament of the Patient. To which we may add, as a confirming Circumſtance, the uſe of ſweet things, which eaſily turn acid.

When the hyſteric Woman lies deſtitute of Senſe and Motion, you may know if there is life, by uſing a Looking-glaſs, or Feathers, or blowing Snuff up the Noſe.

This Diſeaſe is ſeldom mortal in Maids, for it diſappears for the moſt part in time of Child-bearing; indeed if it ſeize Women with Child 'tis dangerous; in old Women 'tis ſeldom cured.

In delivering the Cure of this Diſeaſe, we ſhall order what is to be done in the Fit, and what out of it. The Violence and Fury of Hyſteric Paroxyſms ſuffer us not to

ſtand

ſtand idle Spectators, but require a ſpeedy help, both with external and internal Remedies.

As for Externals, firſt we muſt apply to the Noſtrils ſuch things as yield a ſtrong and ſtinking Smell, regarding ſtill the temperament of the Patient: Above all, I eſteem volatil penetrating Salts; as Spirit of Sal-armoniac, Spirit of Harts-horn, or any other urinous volatil Spirit. In great Swoonings, Caſtor infus'd in ſtrong Wine, and the Smoak of things burnt may be uſeful, as that of Amber, Nutmegs, Feathers and Quills of Birds, chiefly of Partridges, Hairs and Horns of Beaſts, Lignum Aloes, &c.

In the mean while, to allay the Contraction of the Inteſtines, apply to the Region of the Navel and Pit of the Stomach aromatic Oils, ſuch as that of Rue, Aniſe, Laurel, Caſtor, Amber, fetid Oil of Tartar, Guajacum, Spike, &c. or an Ointment made of Clary boil'd in Butter, or Camphyr diſſolv'd in Oil of Sweets Almonds. Or,

Take diſtill'd Oils of Amber, Spike, of each half a dram of Cummin, half a ſcruple; of Mace, nine drops. Mix and anoint the Back-bone, Region of the Navel, and Pit of the Stomac. Some apply beaten Garlic.

After anointing it will be fit to apply a Plaiſter of Galbanum, to which ſome add Tacamahac, Caſtor, Pitch, &c. A Girdle ſtrongly ty'd about the ſhort Ribs is helpful; as alſo ſweet-ſmelling things apply'd to the Genitals, as a Peſſary anointed with Peruvian Balſam, or Oil of Nutmeg, wherein ſome Civet is diſſolv'd, &c. It will likewiſe be proper to inject Clyſters of Carminative, Aromatic, and Penetrating Ingredients, to which volatil Salts ſometimes may be added. As.

Take Chamomil with the Flowers, Leaves of Sage and Fever-few of each a handful; Roots of Angelica and Lovage, of each ſix drams; the four leſſer hot Seeds, Salt of Tartar, of each a dram: boil them in a ſufficient quantity of common Water; to nine ounces of the ſtrain'd Decoction, add Electuary of Bay-berries, an ounce; diſtill'd Oil of Amber, volatil Salt of Harts-horn or Urine, of each a ſcruple; the Yelk of one Egg: Mix them, and make a Clyſter.

To ſuch Decoctions you may alſo add Electuary of *Hiera Picra*, Caſtor, diſtill'd Oils of Cummin, Caraways, Amber, Juniper-berries, Turpentine, &c. Or, inſtead of diſtill'd Oils, volatil Salts, from a ſcruple to half a dram; as that of Urine, Harts-horn, Amber, &c. Clyſters of the Smoak of Tobacco are alſo approv'd.

If the Patient is plethorick, a Vein may be opened, but with due caution.

Internally in the time of the Fit, volatil and oily Salts are to be us'd, and in particular such as readily cause Sweat, to which Opiats may be added: Bitter things therefore are in common use, such as Set-wall, Southernwood, Wormwood, Lovage, Angelica, Gentian-root, Mint, Galangal, Penny-royal, Fever-few, Clary, its Decoction and Spirit, Roman and common Chamomil, Orange-peel, wild Carrot-seed, Juniper-berries, Garlick taken in Wine, its Electuary, Saffron, Rosemary, Myrrh, Elder and dwarf Elder-berries, &c. all which by virtue of an oily volatil Salt destroy the vitious Acid. To these we may add Castor, *Assa fœtida*, the volatil Salts themselves; as Spirit of Sal-armoniac, Harts-horn, volatil Salt of Amber, (given from five grains to twelve in Swallow-water with Castor) distill'd Oil of Amber; volatil Salt of Soot, the Tincture of Tartar, Tincture of the Dross of the *Regulus* of Antimony, Tincture of Castor prepar'd with Spirit of Wine or otherwise; all the several Preparations of the foremention'd Simples; *Crollius*'s Elixir for the Womb; Camphyr, the Spirit of human Secundine, chiefly that of the first Child; the Juice of Courser's Dung, express'd with Wine or Ale, or its Decoction: to all which we join Opium, Hysteric *Laudanum*, Mithridate and Triacle; of which innumerable Prescriptions might be made up. As,

Take of the Waters of Mint, Elder-flowers, and Fever-few, of each an ounce; Essence of Castor, three drams; volatil Salt of Harts-horn, twelve grains; that of Amber, eight grains; Hysteric *Laudanum*, nine grains; Syrup of Orange-peel, six drams. Mix, and make a Potion. Or,

Take prepar'd Amber, prepar'd Pearls, or Crabs-eyes, Castor, of each a scruple; distill'd Oils of Rue and Amber, of each five drops. Mix, and make a Pouder.

'Tis to be noted that Preparations with Castor, and such like fat volatil Salts, yielding a strong smell, agree not with some Patients, for whom meagre Salts are more proper; as dulcify'd Salt of Nitre, &c. If sweet Smells or Tasts be offensive, we choose Medicines of contrary Qualities.

After the Fit is over, if a Relapse is feared, it may be prevented by the use of Medicines partaking of Steel. As,

Take Antiscorbutic and Hyssop-water, of each an ounce and a half; Solution of Steel in Juice of Apples, three drams; Spirit of Scurvy-grass, a dram and a half; fermented *Laudanum*, two grains; Syrup for the Scurvy, three drams. Mix, and make a Potion.

But

But if what is above preſcrib'd prove ineffectual, we may try a ſtrong Snuff, and if that has no effect, give a Vomit; yea Blood-letting has been found ſometimes to avail in deſperat Caſes.

Hitherto we have preſcrib'd what is to be done during the Paroxyſm; when 'tis over, we firſt give Digeſtives, then Vomits, and afterwards Anti-hypochondriac and Anti-ſcorbutic Remedies: For Digeſtives, I refer you to the hypochondriac and ſcorbutic Diſeaſes. Or,

Take red Coral prepar'd, or Mother of Pearl, or Crabs-eyes prepar'd, half a dram; *Arcanum Duplicatum*, a ſcruple; Salt of Wormwood, half a ſcruple. Mix for three Doſes.

For to Vomit, take of *Arcanum Duplicatum*, or *Tachenius's* vitriolated Tartar, nine grains; *Mynſicht's* Emetic Tartar, two or three grains. Mix, and make a Pouder.

Next to theſe, Aromatics mix'd with mild Laxatives are to be us'd; which are almoſt the ſame with the internal Specifics preſcrib'd in the Fit. In ſhort, the Method of Cure is the ſame with that of hyphchondriac and ſcorbutic Diſorders: So that alterative Bags of carminative Ingredients, ſuch as are friendly to the Nerves and Womb, infus'd in Wine, are of very good uſe; as well as whatever partakes of a volatil Alcali, or a volatil oily aromatic Salt more or leſs bitter, which deſtroys Acids, or has an anodine Quality; as the Roots of Angelica, Butter-burr, Set-wall, Lovage, Gentian, and the like; alſo Orange-peel, and all Aromatics, eſpecially Clary, and its Decoction; alſo Baum, Roſemary, Mugwort, Sage, &c. the Carminative Seeds, or thoſe call'd hot; to which wild Laxatives, ſuch as black Helliebor and Briony may be added: As for example,

Take of the Leaves of Baum, Fever-few, Pennyroyal, of each a handful; Leaves of Senna, Roots of Gentian and black Hellebor, of each a dram; prepar'd Spurge, and true aromatic Coſtus, of each three drams; Set-wall, Salt of Tartar, of each half an ounce: Cut, bruiſe, and tie them in a Bag to be infus'd in Wine.

Medicines of Steel are wonderfully helpful; as alſo ſuccinated Spirit of Sal-ammoniac given to thirty drops at night and mild Laxatives mix'd with Opiats.

Take Gum-ammoniac diſſolv'd in Vinegar, half a ſcruple; Vitriol of *Mars*, five grains; Extract of Caſtor, three or four grains; Extract of Troches Alhandal, a grain; or of the Troches themſelves, three grains. Make Pills with the diſtill'd Oil of Amber.

SECT

SECT. IV.

Of the Disorders of Women denying Admission to Men.

CHAP. I.

Of the Down-falling of the Womb.

SOmetimes the outer Neck of the Womb, especially its internal wrinkled Membrane, either by hard Labour, or the unskilful Hand of a Midwife, or by an immoderate red or white Flux, is so relaxated and extended, that it hangs out in the form of a Ball, having a Hole in the middle, two Finger's breadth without the Privity; and sometimes some part of the internal Membrane is relaxated, and hangs out like a blind round Ball by a small Neck. In this Case both the Ancients and some of the Moderns fancy that the Womb falls down: Whereas that Symptom never happens but when an unskilful Midwife pulls it down by force, and so kills the Patient outright.

This Distemper is usher'd in by a stretching Pain of the Parts to which the Womb is fasten'd; sometimes a Fever and Convulsions supervene, and sometimes the prominent Substance becomes the Seat of an Ulcer or Gangrene, and must be cut out by the Hand of a Surgeon.

All that Art can do is, 1. To restore the Part fallen down to its natural Place. 2. To confirm it there either truly by Astringents, or palliatively by other means. 3. If that can't be compass'd, Amputation is the only relief.

The Patient being conveniently plac'd on her Back, let the Part be gently put up with one's Fingers cover'd with a soft Cloth wet with the Decoction of mild discussive Aromatics; such as Rosemary, Sage, Wormwood, &c. boil'd in equal parts of Wine and common Water, or Blacksmiths-water.

This done, Decoctions prepar'd of vulnerary Astringents are to be us'd internally; such as those of Rupture-wort, Mouse-ear, Knot-grass, Comfrey-root, Cyprus-nuts, Betony, Tormentil, &c. to which Anise and Fennel-seeds, and the four greater hot Seeds may be added.

Externally alſo Aſtringents muſt be us'd; the Place may be fumigated with their Smoak, or their Decoction injected, or the Privity fomented therewith, or a Peſſary of carded Wool may be dipp'd in it and apply'd. Such Aſtringents are Galls, Oak-leaves, and thoſe of the Myrtle, Sloe-tree, Horſe-tail, Ladies-mantle, Milfoil, Pomegranate-rind, Sumac, and the like, which may be boil'd in Forge-water, adding Allum, if the Parts be not excoriated or exulcerat. The Moſs of the Oak-tree alſo, and Nettles and Sun-flower are commended.

For a Palliative Cure you may uſe Wax or Cork, white Wax, or the Maſs of a Plaiſter made of Wax, Colophon, Gum Elemi, aud the like, ſhap'd into a round, oblong, or Pear-like Form, according as there is occaſion, with a Hole in the middle, and a Thread faſten'd to 'em: their bigneſs muſt exactly anſwer that of the *Vagina*.

But if it is only an Excreſcence, or one or two Wrinkles of the *Vagina*, or if the *Vagina* it ſelf being fallen down is altered by the Air, or corrupted or ulcerated, it muſt be cut off by the Root, a Ligature being firſt made with a Thread; and then it muſt be cur'd as an Ulcer.

CHAP. II.

Of the Inflammation of the Womb.

THis is caus'd by Blood ſtagnating in the Pores of the Womb, which is occaſion'd either by too frequent Coition, or cold catch'd after Labour or the Terms, or by hard Labour.

The Signs are a Swelling, Heat, ſtretching Pain of the Genitals, Groin, and Navel, which, if the Finger is put up into the Genitals, is exaſperated, and extends to the Hips, Back-bone and Shoulders; the *Vagina* is red and attended with ſwollen Veins, Thirſt, drineſs of the Tongue, Head-ach, Delirium and Convulſions.

It is dangerous enough, and is eaſily converted into a Gangrene: Diſcuſſion is ſafer than Suppuration; ſometimes it degenerates into a Schirrus, and is accompanied by a Dropſie.

The Patient muſt in the beginning be let Blood at the Arm, and, a Clyſter being given, next Day at the Ancle; afterward you may uſe temperate, emollient, and reſolving Clyſters of the Decoction of Lettuce, Mallows, Violet-leaves,

Flowers

Flowers of Chamomile, &c. boil'd with Lime-water, mix'd with lenitive Electuary, solutive Syrup of Roses, and Nitre. To loosen the Belly, give Decoction of Tamarinds, wherein Senna with Cream of Tartar has been infus'd.

Externally we foment the Groin, or apply Cataplasms of Mallows, Marsh mallows, Pennyroyal, Mugwort, Melilot, &c. boil'd in common or Lime-water or Wine.

CHAP. III.

Of Ulcers of the Womb and Vagina.

THE Causes are either internal, as the Suppression of the Loches, suppurated Inflammations, Corruption of the *Fœtus* or *Mola*, a virulent Clap, the Whites, &c. or external, as frequent and excessive Venery, fretting of the *Vagina*, hard Labour, &c. The naked Eye, or a Womb-glass discovers 'em; or if they lie deep in the Womb it self, the troublesom biting Pain of these Parts when tickl'd in Coition, or by sharp Injections, reveals the Mystery. They degenerate frequently into Fistula's, or end in a Dropsie; and tho' they be cicatriz'd, infect Barrenness.

If they proceed from an external Cause, they must be cur'd by consolidating Remedies; if from the sharpness of Humours, they must be corrected and evacuated: but first of all, the Pain must be mitigated.

Internally cleansing vulnerary Decoctions are useful, such as those of the Tops of St. *John*'s-wort, Ground-Ivy, Plantane, Sanicle, Shavings of Hartshorn, &c. Externally the same Decoctions may be injected. Or,

Take of chalybeat Milk, one pound; Turpentine dissolv'd in the Yelk of an Egg, half an ounce; Hony of Roses, an ounce; to be often injected for cleansing and consolidating the Ulcer.

SECT. V.

Of the Disorders of Conception.

CONception is nothing else but the Impregnation of one of the little Eggs contain'd in the Female Testes, by a certain Air or Spirit exhal'd from the Seminal Liquor of

the Male received into the Womb. The Egg thus influenc'd, falls off into one of the Womb-Trumpets, which at that time embrace the Teſtes, and thence paſſes unto the Womb. Being received there, it ſtraight begins to increaſe, and then one little Point begins to diſtinguiſh its ſelf by its tremulous and leaping Motion, being ſurrounded with ſubtil red Threads, or the Rudiments of the Blood-veſſels, round which, ſome ſmall time after, is to be ſeen ſomething more groſs and white, like a little Cloud diſtinguiſh'd into two Parts, whoſe greater Part conſiſting of four little Bags, repreſents a rude Draught of the Brain, *Cerebellum*, and two Eyes; and the leſſer Part being ſtretch'd out below like a Ship's Kiel, is the Rudiment of the Back-bone, from which the Limbs gradually extend themſelves, while the Bowels ſucceſſively ſhoot out from the Blood-veſſels, till the perfect *Fœtus* is form'd.

The Matter of which it is form'd is partly a clear Liquor reſembling the white of an Egg, convey'd thither by the Arteries, and ſqueez'd through the glandulous Subſtance of the Womb into its Cavity; and partly Blood elaborat from the foreſaid Chyle or nutritious Juice; ſo that the Parts are rightly diſtinguiſh'd into ſanguine and ſpermatic.

There are ſcarce any infallible Signs of Conception; however ordinarily if a Woman hath conceived, the internal Orifice of the Womb is cloſe ſhut up, the Terms are ſtopp'd; In the firſt Days after Coition, a certain ſhivering or wandring Senſe of Cold ſpreads it ſelf over the Body or its extreme Parts; the Appetite is impair'd; ſhe vomits every Morning, and is troubled with Longings, and the loathing of ſuch Meats as formerly were grateful. If the Woman is cacochymical, and ſcorbutic, ſhe is troubled with hyſteric Affections, tho' unacquainted with 'em before; a gradual Swelling invades the Belly, and points upwards. In the third, fourth, or fifth Month the Child is felt to move in the Belly; firſt more obſcurely, and afterwards more diſtinctly: finally, the firſt Months oftentimes diſcover a heavineſs and giddineſs of the Head, and ſometimes the Tooth-ach; from which Signs concurring we may conclude the Woman is with Child.

With reference to Conceptions, we ſhall treat of falſe Conceptions, Barrenneſs, and vitious Conceptions.

Conception is counterfeited by an Inflation or Swelling of the Belly, cauſed by external Air received into the Womb after Child-bearing, or Abortion, or Bathing, or in the time of, or after the Menſtrual Flux; and attended ſometimes with cruel Pains girding the whole Belly.

This

Storax, Mastic, &c. and Pessaries prepar'd of the bruis'd Leaves of Fever-few, and sprinkled with a little Oil of Spike.

After Barrenness we come in order to vitious or deprav'd Conceptions. They are said to be such when the Subject of Conception departs from a Human Form, and assumes that of other Animals, intitling it to the Character of a Monster; or continues a shapeless Lump void of Form, and is christen'd a *Mola*.

The immediate Cause of a *Mola* is the Confusion or Mixture of the nutritious Humour contain'd in the *Chorion*, with that of the Egg; upon which the Tracts of the *Fœtus* delineated in the latter are effaced by the former.

If this Confusion be very early, it generates a watry vesicular *Mola*: If its date be as late as the forming of the Vessels, and their repletion with Blood, it leaves a fleshy Lump; which, if the fibrous Threads are already spun out, and enrich'd with Spirits, is endow'd with a principal Motion.

This vitious Mixture is oftentimes occasion'd by violent Motion, Passion or Heat.

'Tis a difficult thing to distinguish a *Mola* from a true Conception, especially if a Child accompanies it in the Womb; in which case it either kills the Child or causes Abortion. However if we carefully observe, we may discern a *Mola* by its much greater weight; and by the measure of its motion, which is either none at all, or such as by its sluggishness is easily distinguish'd from the brisk Motion of a living Child. If it possess the Womb alone, it generally putrifies, and entails the like mischief to the Womb.

First of all we ought to observe carefully whether the *Mola* is join'd with a Child; and if so, we must endeavour to prevent Abortion, and expect the exclusion of the Child with which the *Mola* is ordinarily expell'd. But if the *Mola* is alone, we must endeavour with all convenient speed to procure its ejection: for which purpose we must use first preparative, and then expelling Medicines.

Preparatives are Baths, Fomentations, Inunctions, Clysters both for the Belly and Womb, &c. of emollient and laxative Ingredients: Womb-clysters must be of Oil, those for the Belly of Milk.

In the next place, a Vein must be opened, first in the Arm, and then in the Foot; after which we may use strong Vomits either from Antimony or Vitriol; and powerful Purgatives,

ſuch as the fœtid Pills, thoſe of Hiera with Colocynth, or the Decoction of Senna, Pennyroyal and Savin in Whey, taken for three Days ſucceſſively.

To theſe we ſubjoin ſuch Medicines as bring down the Terms, and are intitled to an expulſive Faculty, *viz.* Rue, Mugwort, Pennyroyal, Savin, Briony, Gentian, Aſarabacca, Dill, Juniper-berries; the Eſſence and Oil of Cloves, the Decoction and diſtill'd Oil of Savin; or a Pouder made of equal Parts, of Borace, Myrrh, Caſtor and volatil Salt of Amber, given to half a dram in Cinnamon-water twice or thrice a Day for ſome time: the Pouder alſo and Spirit of an After-birth is much commended.

Externally alſo, we muſt uſe Clyſters for irritating the *Vagina* and internal Orifice of the Womb, and moving them to convulſive Motions; ſuch are the Decoctions of Pennyroyal, Feverfew, Savin, and Pulp of Coloquintida ty'd in a Bag. Peſſaries and Fumigations from the ſame Ingredients are alſo proper; but withal let the Patient uſe ſome violent Exerciſe; ſuch as Leaping, Jumping, *&c.* to promote the Operation of the Remedies.

If all theſe Preſcriptions prove ſucceſsleſs, we muſt have recourſe to a skilful Surgeon, who with a *Speculum Uterinum* muſt dilate the *Vagina* and internal Orifice of the Womb, and by his Hand or Inſtruments draw out the whole *Mola*. And if after the Extraction, exceſſive Bleedings and Pains of the Womb inſue, exhibit the following Electuary.

Take Conſerve of Roſes, an ounce; Conſerve of Quinces without the Species, half an ounce; Troches of Amber, ſeal'd Earth, and Spodium, of each half a dram; Sorrel-ſeed, and burnt Hartſhorn prepar'd, of each a ſcruple: With Syrup of Quinces and that of Mint make an Electuary.

SECT. VI.

Of the Conduct of Big-belly'd Women.

WHile Women are with Child, they ought to be very cautious of the uſe of the ſix Non-natural Things, for fear of incurring the Dangers that the Suppreſſion of their Terms expoſes 'em to, and provoking the Child to an untimely Egreſs. In

In their Diet let Custom be their Rule, since things unwonted, tho' of themselves proper, are offensive, and *è contra.* Summer-fruits, violent Aromatics, and strong Smells, whether sweet or fœtid, are pernicious. Much Wine and acid Liquors are apt to cause Abortion. Violent Motion is also dangerous, especially during the first Months, tho' in the latter Months if it be moderate 'tis not inconvenient. Venery, long Watchings, Fear, Anger, and such-like Passions, ought to be avoided. Costiveness ought to be remov'd by the Pulp of Tamarinds, or Oil of sweet Almonds; Cream and Salt of Tartar, or Rhubarb, mix'd with Carminative-seeds. Sometimes poach'd Eggs and Sugar are sufficient. Proper Purgatives or strong Clysters are very dangerous. Sometimes it will not be amiss to strengthen the Child by a moderate Draught of sweet Wine after eating, by exhibiting Cinnamon-water impregnated with Borrage and Quinces; or the Juice, Syrup and Marmalade of Quinces mix'd with Cloves, Mace and Nutmegs; or at Bed-time to apply to the Belly a Bag quilted with Mint, Baum, Ginger, Cloves, Galangal, *&c.* sprinkl'd with the Oil of Citrons, or that of Orange-peel.

If a big-belly'd young and plethoric Woman be seiz'd with an acute Disease, Blooding is not improper; but 'tis better to blood frequently than draw forth much at one time. If her Stomach be disorder'd, mild Vomits are allowable during the first four Months: but Purgatives, at least such as in violence surpass the Laxatives above-mention'd, are always suspected. Narcotics in general threaten the Relaxation of the Fibres of the Womb: But in some Cases when the Animal Spirits are much irritated, and such other Circumstances seem to demand it, we may venture to allow a moderate Dose of Opium.

All the peculiar Symptoms of big-bell'd Women are occasion'd by the Influence of the seminal Liquor, the Suppression of the Terms, and the Sympathy of the Stomach with the distended Womb. The first is Vomiting, which in the first Months ought not to be stopp'd, for it facilitates Delivery. In the last Months it is dangerous, and ought to be curb'd betimes. Toward the middle of their Reckoning, Bloodletting removes it; unless they be Cacochymical, in which Cases the absorbent Pouders and stomachical Ingredients are requir'd: But Steel is hurtful. Externally stomachical Plaisters are likewise useful. To this Symptom we may add a Pica, loathing of Meat, griping of the Guts, which we accounted for in the first Book.

A Looſneſs in the firſt Month is dangerous. Towards the latter end it is of leſs conſequence, unleſs it exceed bounds; upon which account we ought to be very cautious in ſtopping it. If it be accompany'd by a proſtration of Strength, or ſigns of Malignity, and threaten Miſcarriage, let aſtringent Acids and *Venice* Triacle, or *Diaſcordium* diſſolv'd in acid Vehicles, be exhibited, and proper Plaiſters applied externally; but all Purgation is pernicious. The Pains of the Loins, Hip-bones and Pubes, caus'd by the various diſtention of the Ligaments of the Womb and the annex'd Membrans, according as the Child is ſeated, forwards or backwards, are remov'd by anointing with the Oil of Earthworms mix'd with diſtill'd Oil of Juniper; or applying the Spirit of Earthworms mix'd with *Aqua Articularis*. The Toothach in Women with Child yields to the common Cure. A Palpitation of the Heart happening to a luſty Woman, about the middle of her Reckoning, is cur'd by Blood-letting, or elſe by the ordinary Method. If a Cough moleſt a Woman with Child, we muſt vary the Cure according to its nature, as in the firſt Book.

Child-bearing Women are frequently ſubject to bleedings. If the Blood flow from the *Vagina* of the Womb, it runs gradually, at ſet times, without Pain; and ought not to be ſtop'd. If it proceed from within the Womb, it runs continually, cauſing Pains in the Loins, and if the Woman or Child be not weak, may be gently moderated by Blooding, and the common Specifics: But if the Child move weakly, and the Womans Appetite and Strength be dejected, 'tis neceſſary to promote Miſcarriage by external Aſſiſtance. If the Blood break forth only at other parts of the Body, it argues a ſcorbutic Diſpoſition of the Blood, which is cured by Chalybeats.

A ſuppreſſion of Urine is caus'd by the low Situation of the Child, and its bearing down upon the Bladder; and is cur'd by emollient Ingredients us'd both inwardly and outwardly, and by heaving up the Belly upon occaſion of making water. Proper Diuretics are ſcarce ſafe. A Strangury is cur'd by Laxatives; ſuch as the Syrup of Peach-flowers and Emulſions, and Decoctions of Marſhmallows with Raiſins, or of Jujubes and Peach-ſtones. The Cramps that Child-bearing Women are ſubject to, are cur'd after the ordinary Method, eſpecially by external Inunction and Fomentation. The Pain and Chops that moleſt the skin of the Belly, as being caus'd by its diſtention, are remov'd by applying emollient Oils and Mucilages. If the Waters break forth

rth from the Womb, especially from within the *Amnios*, fore the time of Delivery, 'tis a dangerous case, and their is ought to be repair'd by anointing the Passage with emol- ent Oils and Ointments. But if the Flux of Water pro- ed only from the outer Neck of the Womb, and is now low'd by the true Pains of Child-birth, 'tis of no great nsequence.

Sometimes cacochymical big-belly'd Women are troubled th Swellings of the Feet, which disappear upon Child- rth, as being remov'd by the Flux of the Loches. If these ellings be very troublesom, anoint the Legs and Feet th the Oils of Dill and St. *John's*-wort, and apply a Ca- plasm of Chamomil-flowers; or foment 'em with Quick- e Water. If hydropic Tumours invade the external tivity, foment it with Quick-lime Water, and apply a rminative Cataplasm. Or if these prove successless, apply eeches, or scarifie the Part. If the Veins of the Legs are ch swell'd, so as to threaten a Rupture, anoint 'em with e Ointment of Bay-berries, and tie 'em round with a broad wathe dipp'd into some astringent Decoction. If the He- orrhoids swell, anoint with the Oil of the Balsam-apple, or ply a Cataplasm of the Pulp of boil'd Apples and Oil of oglice.

SECT. VII.

Of Disorders relating to Child-birth.

THe regular Season of Delivery happens about nine solar Months after Conception; or after ten periodical Re- olutions of the usual Interval of the Fluxes of the Terms. If is time be anticipated, 'tis call'd Miscarrying, supposing still at the Child is form'd: for if the Egg be evacuated before be form'd, 'tis call'd Expulsion. The cause of Miscarrying either the Irritation and Contraction of the Womb, occa- n'd by irregular Passions, violent Motion, drinking Wine, pecially in the first Months, ungrateful strong Smells, exter- l Cold, acid Food, the Weakness or preternatural Situa- n of the Child, the Disorders of the Kidneys, Intestines, d adjacent Membranes, the Redundancy and Exaltation of e Mass of Blood; or the Relaxation and Flagginess of the Womb,

Womb, arising from exceſſive Bleeding, want of Spiri immoderate uſe of Opium, ſudden Grief or Fear, a chroni white Flux, *&c.*

The Signs of imminent Abortion are a Heavineſs abo the Loins and Hips, and wandring ſhooting Pains movi downwards from the Navel. To which we may add a La neſs, Inappetency, the Womb's gathering it ſelf into t form of a Globe incumbent upon the Share-bone, S verings, Tremblings, Palpitations of the Heart, the Efflux Matter from the Womb, and an involuntary bearing dow wards. *Hippocrates* look'd upon the Flagginess and Extens tion of the Breaſts, or their voiding of Milk or Blood, as ſign of Miſcarrying. It prognoſticates Barrenneſs, Bleedin of the Womb, *&c.*

As for the Cure of Abortion; if the Fœtus be alrea ſeparated, we ought to aſſiſt Nature in the Expulſion; a on the contrary, if Abortion be only threaten'd, we ough to prevent it by Blood-letting, if the Woman be pleth ric; or otherwiſe by exhibiting the Decoction or Wat of Vervain, the Pouder or Tincture of Chermes-berrie the Pouder or Juice of River-crabs, or the Tincture Coral. If the Spirits be much irritated, Opium is allowab If the Womb be flaggy, let a Cataplaſm of Bdellium a Maſtic diſſolv'd in Vinegar, or a Plaiſter of Galbanum a Tacamahac be applied to the Pubes; or bathe the Parts wi an Infuſion of Allum in the firſt Months; or let the W man make uſe of the natural Hots-baths before impregn tion. A Cataplaſm of Yeſt (or Bread bak'd with Peppe Cloves, Cinnamon, Mace and Wine, applied to the Pube is of good uſe againſt all ſorts of Abortions. If Abortion b cans'd by the Paſſions of the Mind or acid ſharp Foo uſe abſorbent Pouders mix'd with Aromatics; Opium ca tiouſly uſed, and Fomentations with aſtringent Decoctio are very proper. If it proceed from external Cold, *Aq Vitæ* and ſpirituous Liquors are requir'd. If Swooning uſher it in, the Tincture of Coral prepar'd with Spirit Stag's Heart, and the Confection of Hyacinth, are uſeful. ſerous Cachexy is accounted for by the Decoction of Gu jacum; and the White Flux remov'd by cutting Iſſues in th Legs.

If Abortion cannot be prevented, let the Woman after Mi carrying beware of the leaſt degree of cold; and let th After-birth be cautiouſly drawn forth by the Midwife, with out giving any internal Medicines for that purpoſe, for fear

occa

occasioning a Flux of Blood, which in this condition Women are very liable to. So much for Abortion.

If the Woman is come to her full time, the first thing to be consider'd is, if the Child presents in a right Posture, *viz.* the Head first; if not, the Midwife must endeavour to set it right, or else to pull it out by the Feet. If the Posture be regular, the next Task is to distinguish between the true and spurious Pains of Child-birth; the spurious Pains are either colic, hysteric or nephritic, which assume the form of the true ones, and impose upon the Midwives under that cover. They are cur'd by exhibiting the Spirit of Zedoary or Decoction of Cumin-seeds in Ale, and rubbing the Belly and Back with hot Napkins, or fomenting them with the Decoction of Carminative and Anodyn Ingredients; whereas the true ones are rather irritated by that Method, and besides are attended by these Signs, *viz.* the down-falling of the Belly towards the Pubes, the Progress of the Pains from the Loins downwards, the opening of the internal Orifice of the Womb, and the distention of the Membrans enwrapping the Child. Now it is highly pernicious for a Woman to bear down or endeavour the Expulsion of the Child before the appearance of these Signs.

Supposing then that the true Pains are come upon her, we must endeavour to facilitat her Labour. Now the Causes of hard Labour are the weakness and sickliness of the Mother, her Spirits being exhausted by sweating or spurious Pains either antecedent or concomitant; her being liable to the Passions of Fear, Shame, or whatever cramps her due Efforts, or interrupts or inverts the Motions of her Pains; the weakness of the Child, its being intangl'd in the Navel-string, or disturb'd by a fellow Twin; the hardness and thickness of the Membrans enwrapping it; the straitness or dryness of the Passages (the former incident to stale Maids converted into Wives, the latter following the untimely Efflux of the Waters) the stiffness and resistence of the Share-bone, and that of the Back call'd Coccyx; the repletion of the Bladder and Intestins; Excrescences in the Womb or neighbouring parts; extreme Laxity of the Neck of the Womb, disabling it for Contraction and Expulsion; and a hydropic Tumour in the Child's Head, or its leaning on the Share-bone. In which last Case the Head ought to be put back by the Midwives Hand; otherwise all expelling Medicines do but augment the Evil.

Now

Now in order to prevent such Inconveniencies, a few da before the hour of Delivery, let the Woman bathe in th Decoction of Marsh-mallows, Melilot, Chamomil, Pennyroya Mug-wort, Wild Thyme, Baum, Fever-few, Seeds of Lint, Fen grec and Dill; or apply Bags of the same Ingredients to he Belly; anointing afterwards her Back, Belly and privy Pa sages with an Ointment of Mucilages and emollient Oil When her Pains are just at hand, 'twill not be improper to in ject a softning carminative Clyster, or exhibit Oil of Oliv inwardly, and anoint the Parts frequently. If the Pains a discontinu'd, the Woman must not be forc'd to bear dow She ought rather to walk a little about; and when the Or fice of the Womb is open, and the Waters broke, then le her be plac'd on the Stool, and incourag'd to a speedy Del very. If the Mother or Child be weak, let her take a Gla of Cinnamon, Baum, Pennyroyal, or the compound hyste ric Water mix'd with the Syrup of Orange-peel, or of Mug wort, &c.

When the Pains relent, if the Child presents naturall and the Waters are broke, and the Orifice of the Wom open'd, we may exhibit aromatic and expelling Medicine but not otherwise. The Aromatics are Dittany of Cret Sage, Mugwort, Saffron, and especially Cinnamon, whic ought never to be omitted. The expelling Specifics are Draught of the Husband's Urine, of the Juice of Hors dung mix'd with Wine; Castor, Oil of Amber given fro ten to thirty drops in Pennyroyal-water with a few drop of the Oil of Cinnamon, the volatil Salt of Amber give to fifteen grains; The Oil of Hazel-wood given from fi teen to twenty five drops; Troches of Myrrh or *Pilul Fœtidæ* given to dram; Borace given to a dram; the Pou der of the Liver of an Eel dry'd together with the Gal bladder, given to a dram; the Pouder of the Livers of V pers, or of Horses Stones given to a dram; crude Mercu ry, fulminatory Gold, and above all the Pouder of a dry' human After-birth, given to a dram; or its Spirit draw from it when it has stood for a Month in a close Vessel in *Balneum Mariæ*, given to forty drops: in the room of whic we sometimes make use of the Spirit of Soot. If the Pain recur frequently and the Woman be much fatigu'd, we ma add *Laudanum Opiatum*.

Take of the Pouders of an Eel's Liver, and a human A ter-birth, of each a dram; Myrrh or Borace, two scruple Make a Pouder for three Doses.

Tak

Take of the Water of white Lillies, two ounces; Cinnamon-water, half an ounce; Baum and Pennyroyal-waters, of each an ounce; Pouder of Horse Stones, four scruples; Borace, two scruples; Essence of Castor, and that of Amber, of each twenty drops; distill'd Oil of Nutmegs, six drops; white Sugar, two drams. Mix, and give a spoonful now and then.

Externally apply a Girdle of Snakes cast Coats, or anoint the Belly with an Ointment made of them with Earth-worms, and the Juice of River-crabs, and the Fat of a Fox or Hare. Or, Take of the Oil of Wall-flowers, six drams; distill'd Oil of Amber, a dram. Make an Ointment for the same purpose. Or, Take of the Fat of Vipers, six drams; Oil of the Balsam-apple, three drams; distill'd Oil of Spike, a dram. Mix, and anoint the Belly, but be sure to wipe it off after Delivery. Or, Take of Galbanum dissolv'd in Vinegar, an ounce; Myrrh, two drams; Saffron, half a dram; with Oil of Orris make a Pessary. Some choose to apply a Cataplasm of the Decoction of Coloquintida, Rue, Myrrh, and Meal of Barley.

If all these Means prove successless, we must have recourse to Sneezing Medicines, made of Hellebor, Marjoram, Tobacco, Pepper, Castor, &c. and if these be ineffectual, to *Mercurius Vitæ* for a Vomit. Sometimes lusty Women, accustom'd to drink Wine, or that live in hot Climates, are reliev'd by Blood-letting. If the Mother be seiz'd by Convulsions or Bleeding from within the Womb, she ought to be immediately laid by a skilful Hand. If the Mother be dead, and the Child alive in the Womb, it ought to be cut out.

Often-times Child-birth is render'd difficult by the Death of the Child in the Womb; in which case the same expelling Medicines are to be us'd, but in larger Doses. Besides the external Applications already injoin'd, some recommend a Fumigation of the Womb with the Smoak of rotten Berries thrown into boiling Water, or with the Smoak of Troches made of Myrrh, Castor, Snakes cast Coats, Pigeons-dung, Madder-roots, and Ox-gall thrown upon the burning Coals. If all the Means above-mention'd fall short of expelling the dead Child, it must be pull'd out either all in one piece by Hooks, or cut into several Pieces.

This Symptom of a dead Child ought to be carefully minded, not only about the time of Delivery, but during the whole Course of the Woman's being with Child, for fear of

of Miſtakes in giving Aſtringents to prevent miſcarrying, when 'tis actually dead; or of indeavouring its Expulſion as being dead, while 'tis yet alive. Now to prevent ſuch Miſtakes, the following Signs will be of uſe. When the Child is quite dead, neither the Mother nor Midwife are ſenſible of the leaſt motion: The Mother's Share-bone, Lips, Face and extreme Parts are cold; her Breaſts that were turgid, are now become flaccid, and their Milk ſerous; ſhe is ſeiz'd with a violent Shivering and Yauning, Swooning, and ſometimes a Fever, Pain of the Head and Stomach, and diſmal Convulſions; her Pains intermit of a ſudden; the Membrane of the Child's Head is flaccid, and often-times the Excrements come forth before the Child. In proceſs of time her Breath becomes fetid, and Water or corrupt Matter drops from the Womb. If the Child be alive, it will move when the Womb is fomented with volatil Liquors, when the Mother holds her Hand in hot Water for ſome time, when a green Leaf of Marjoram bruis'd, or one's Hand wet with cold Water, or Bread ſoak'd in Spaniſh Wine, is applied to the Belly, and a Vein open'd in the Leg. If it do not, you may conclude that 'tis dead.

SECT. VIII.

Of the Management of Women in Child bed.

AFter the Woman is laid, let her be wrapp'd up with a Swathe of Linnen about the Ribs, and carefully arm'd againſt Cold, Anger, Fear, and ſtrong Smells. Let her abſtain from ſleep for ſome Hours, and take a Glaſs of warm Wine with a Toſte for ſtrengthening, quenching Thirſt, and preventing the Symptoms that often-times inſue. After ſome Hours, ſhe may take a potch'd Egg, with Cinnamon or Zedoary; or ſome drops of the Tincture of Coral prepar'd with the Spirit of Stag's Heart. After three or four Days, if ſhe be very coſtive, her Belly may be open'd with Balls of Civet, or Clyſters, or *Elixir Proprietatis*, taken inwardly.

The moſt material Circumſtance relating to a Woman in Child-bed, is the ſeparation of the Secundine; for if any part of it remain, it putrifies and produces tragical Effects. The cauſes of its retention are the Influence of cold Air;

the

the Tumour and straitness of the internal Neck of the Womb; the Corruption or breaking of the Navel-string, by which 'tis generally pull'd out; and the firm adhesion of the Secundine to the Womb. Sometimes indeed if it be united with the Womb, and receive nourishment directly from it without the Fœtus, it may remain unputrify'd in the Body. But for the most part its Nutrition is receiv'd from the Fœtus, and its Adhesion is occasion'd by the early Egress of the Child, or want of due Motion in the Mother, or by external Violence. The Symptons that attend it are an acute Feaver, Pain and swelling of the Belly, Gripings about the Region of the Womb, a stinking Breath, difficult Respiration, and voiding of corrupt matter or Blood from the Womb. If it continue long, it may occasion Ulcers and Gangrens.

In order to prevent this Inconvenience, the Midwife ought to tie the Navel-string to the Woman's Thigh, till she be ready to draw forth the Afterbirth: And then the Mother ought to be incourag'd to promote its Egress, by Sneezing, Coughing, and, in Case of Extremity, Vomiting. If all prove ineffectual, let the expelling Medicines abovementi-on'd be administred; especially the Spirit and Pouder of a human Secundine, Myrrh, Saffron, Amber, Castor, and Borace. If the After-birth be already corrupted in the Womb, exhibit *Elixir Proprietatis*, extracted with the Spirit of *Venice* Triacle camphoris'd. In the interim, let sharp irritating Clysters be injected; and Pessaries of expelling Ingredients put up into the Womb. *Glauberus* orders a Mixture of Sal-Armoniac and Salt of Tartar to be put into a Glass with a long Neck thrust into the Womb. Some anoint the parts with the Oils of Coloquintida, Wall-flowers, Savine, Amber, *&c.* and order Fumigations of Myrrh, Cinnamon, Galbanum, Castor, Opoponax, and Black Hellebor form'd into Troches with Cow's Gall. If these Prescriptions are still successless, the Midwife must put her Hand into the VVomb, and draw it out; or if that cannot be done, its Putrification must be promoted by injecting emollient Decoctions of Marshmallows, Pellitory of the Wall, Chamomil, *&c.* mix'd with Aloes, Myrrh, Oil of Roses and Vinegar of Wine; to which we may add Lime-water, *Unguentum Basilicon*, and a small quantity of that call'd *Ægyptiacum*.

After the Expulsion of the After-birth, the next step is to regulate the Flux of the *Lochia*, or the Child-bed Purga-

tion. If they are deficient, we ought to consider if they are not voided some other way, as by the Nostrils, Stool, &c. In which case we ought not to disturb Nature, unless grievous Symptoms oblige us. Besides, if the Woman was wont to void but a small quantity of her monthly Courses, or if she suckle the Child, we are not to expect so large an Evacuation as otherwise. The natural Method of this Flux is such, that Blood is voided four Days after Delivery; from thence a watry Liquor like the washings of Flesh till the seventh Day; after that a viscous and serous Humour, untainted with Blood, continues to flow till the fourteenth or twentieth Day. Now the Causes of the Suppression of this Flux are external Cold, drinking cold Liquors, Anger, Fear, Grief, Shame; and the Collection of clotted Blood or viscid Humours in the Womb. The Symptoms of a Suppression, are the Distention, Hardness, and Pain of the Belly, a beating Heat about the Loins and Groin, a shivering Fever, Head-ach, difficult Respiration, Swooning, cold Sweats, Doating, and frequently Death. If the Womb be inflam'd; if a Pleurisie, Dropsie, or Spitting of Blood insue; 'tis a dangerous case.

As for the Cure of a Suppression of the *Lochia*, if the Blood and Fever boil high; if Head-achs, difficult Respiration, and such like Symptoms of the upper Region molest the Person, let a Vein be open'd in the Arm; and after the use of some internal Expellent, open the *Saphæna*; or apply Leeches to the *Vagina*, or scarifying Cupping-glasses to the inside of the Thighs. The internal Medicines are those of an expelling Virtue, recommended above; especially Myrrh, Saffron, Borace, Amber, Zedoary, and *Elixir Proprietatis*. If the Blood be clotted, Castor and *Sperma Ceti*, with Crabs-eyes and Wine, are proper; to which we may add some grains of *Laudanum Opiatum* in case of violent Head-achs and other Pains. Externally let the *Abdomen* be fomented with the Decoctions of Chamomil, Savine, and wild Thyme; and anointed with a Mixture of the Oil of Wall-flowers, and the distill'd Oils of Cummin, Juniper-berries and Amber; applying afterwards a hot Brick, or a Bag (either dry or boil'd in Wine) of Wormwood, Chamomil, Feverfew, Angelica-roots, the four great hot Seeds, and Juniper-berries. If the Urine be also stopp'd, apply to the lower Belly a Cataplasm of Chervil, Pellitory of the Wall, and Oil of Scorpions. In the mean while it will not be improper to inject Clysters of the Decoctions of Specifics

for

for the Womb, and ſtimulating Ingredients; and to order Fumigations from Coloquintida, the Droſs of the *Regulus* of Antimony, Troches of Myrrh, Bdellium, &c. Some put into the *Vagina* a little Bag of black Hellebor. In a word, this Symptom and that of a Suppreſſion of the Terms require the ſame Cure.

Inſtead of a Suppreſſion of the *Lochia*, ſometimes we meet with an immoderate Flux of Blood, attended by a Proſtration of Strength, Dimneſs of Sight, Tingling of the Ears, and Swooning. If the Blood be of an obſcure and blackiſh Colour, it proceeds from the Veins; if its Colour be florid, and a yellowiſh Scarlet, it comes from the Arteries, and portends Danger. The Cauſes are, 1. The Redundancy and watry Thinneſs of the Blood. 2. Its Turgeſcence and accelerated Motion, occaſion'd by the abuſe of ſpirituous Liquors in time of Labour, or the adminiſtration of expelling Medicines. 3. The Wounds of the Womb caus'd by the violent pulling of the After-birth in caſe of miſcarrying, or of its firm Adheſion to the Womb. 4. The Irritation of the Womb occaſion'd by a *Mola*, or Clots of Blood, or Pieces of the After-birth remaining.

The Cure is vary'd according to the reſpective Cauſe: If the Blood be thin, Sudorifics and Incraſſating Ingredients are proper. If it be over-turgid, Purſlain, Plantane, Tormentil, Looſtrife and Acids take place. If the Womb be wounded, the Decoction of Chervil and vulnerary Ingredients are recommended. If a *Mola* or Pieces of the After-birth remaining cauſe an immoderate Flux, we muſt be cautious of uſing ſtrong Expellents, becauſe they promote the Flux: But Aromatic Ingredients mix'd with Aſtringents, may be ſafely adminiſtred. Such are Tormentil, Biſtort, Marjoram, Pennyroyal, Mugwort, Troches of Amber, &c.

In general all Preparations from Quinces; the Pouder of Sea-horſe Teeth (given to a dram) the Preparations of Steel, Blood-ſtone, ſeal'd Earth, burnt Harts-horn, the ſolar Tincture of Steel given to fifteen drops, and the Tincture of the Sulphur of Vitriol given to thirty, Conſerve of Roſes and that of Comfrey-roots, with *Laudanum Opiatum*; and in caſe of extremity, Allum given to half a dram: Theſe, I ſay, are generally approv'd in all caſes. Externally apply Cupping-glaſſes under the Breaſts, or foment the Breaſts and Genitals, with a cold Mixture of Vinegar, Juice of Houſleek, Nitre, and Water of Frogs Spawn; or apply a Cataplaſm of Soot, Vinegar of Roſes, and the Whites of Eggs, to the

Loins. Some order Decoctions of aſtringent Ingredients and Hogs-dung in Smith's Water, to be injected into the Womb. Others recommend a Girdle of black Hellebor-leaves ty'd round the Body. The Redundancy and Turgeſcence of the Blood admits of bleeding in the Arm, but no other Cauſe.

With reference to the Extraction of the After-birth, and Regulation of the Child-bed Flux, we ought to take notice of the After-pains, that often-times ſucceed to Delivery. Theſe After-pains are call'd genuine, when they're ſeated in the Womb, as being only a continuation of its Contraction and expulſive Endeavours, occaſion'd by the irritation of the Womb from Cold, Wind, clotted Blood, the Remainders of the After-birth, *&c.* or its being wounded by ſharp Humours, or a violent tearing of the Secundine. They are ſtyl'd ſpurious when they're lodg'd in the Guts, and aſſume the form of Cholic Pains. The genuine ones are confin'd to the lower Belly, and move downward; whereas the others are more floating, and direct their Courſe upward, eſpecially towards the left *Hypochondrium*.

If theſe Pains proceed from Cold, we order a Fumigation of the Womb with Nutmegs; if from clotted Blood, we adminiſter the Decoction of Chervil and *Sperma Ceti* inwardly. If they occaſion a Suppreſſion of the *Lochia*, thro' the Irritation and conſtriction of the Neck of the Womb, let the Tincture of Tartar, and Eſſence of Myrrh be exhibited. If the Excoriation of the Womb gave riſe to 'em, the Oil of Sweet Almonds, and vulnerary Decoctions mix'd with Chalybeats give relief.

In general the Decoction, Spirit and diſtill'd Oil of Chamomil is univerſally approv'd as an admirable Specific againſt all After-pains: To which we add often-times *Elixir Proprietatis*. Zedoary, Mugwort, Caſtor, the Pouder of a human After-birth, and the Carminative-ſeeds are likewiſe proper Ingredients. In the laſt Extremity we are oblig'd to have recourſe to *Laudanum Opiatum*. Externally we foment the Womb with the Decoction of Mugwort; and anoint it with the Oils of Chamomil, Wall-flowers, Cummin, Dill, Earthworms, *&c.* and apply the Plaiſter of Galbanum, call'd Matricale, or carminative Cataplaſms. As for ſpurious Pains, we treat 'em as Cholics.

Sometimes Women in Child-bed are ſeiz'd with a Drouſineſs, Swooning and Anxiety about the Stomach and Hypochondria, which in effect are the Symptoms of a hyſteric Paſſion, and are remov'd by volatil Salts, as Caſtor, Spirit of Sal-

Sal-armoniac, &c. and Antihysteric Clysters. But if these Symptoms are attended by a Difficulty of Breathing, they threaten an acute Fever, which forbids Clysters, and requires a much different Cure; of which more anon. The Convulsions of Women in Child-bed are generally retainers to this hysteric Passion, or the Suppression of the *Lochia*, and are cur'd by Myrrh and Castor, join'd to succinated Spirit of Harts-horn, and absorbent Powders.

Sometimes hard Labour causes Excoriations, Tumors, or Rents in the Privity. The first and last are cur'd by applying a Liniment of the Oil of St. *John*'s-wort, Balsam of *Peru*, and Yelks of Eggs; the second by fomenting with the Decoction of Chamomil and Elder-flowers in Wine and Water, and applying a warm Cataplasm of fresh Brook-lime and Chamomil-flowers beaten together. If the Capacity of the *Vulva* be so inlarg'd that the Rent passes through the *Perinæum*, let the Woman avoid all motion of coughing, and apply the following Glue to the Lips of the Wound.

Take of Comfrey-roots, two drams; Bole-armenic, Mastic, Dragon's Blood, Sarcocol, fine Flower and Pompholix, of each a dram. With Rosin of the Pine-tree and the Whites of Eggs make a glewy Substance. If the Lips of the Wound are already cover'd with Scars, we treat it the same way as a Hair Lip. If it be inflam'd and tend to a Gangrene, we cut off the corrupt part, wash the sound Flesh with Lime-water, and cover it with the Balsam of Sulphur.

If the Woman in Child-bed be costive, or troubled with the dry Piles, exhibit a very gentle Laxative, and foment the *Anus* with emollient Decoctions. If a Looseness seize her while the *Lochia* are suppress'd, it ought not to be stopp'd any other way than by administring Specifics for retrieving the Flux of the *Lochia*: But if their Flux continues, or if an acute Fever attend the Looseness, it ought to be curb'd betimes, by exhibiting Sudorifics and proper Specifics against Loosenesses, and applying to the Navel or Stomach the Oil of Amber mix'd with the distill'd Oil of Mace. If the Sphincter of the Bladder be so relaxated by the distention of Child-birth, or the roughness of the Midwife's Hands, that the Woman cannot retain her Urine, she must foment the Parts with aromatic and astringent Decoctions, and hang the Pouder of Toads in a Bag over her Breast, or have recourse to the natural Hot-baths. If Clots of Blood collected in the Passage for Urine, occasion its Suppression, let the Pubes be anointed with Oil of Scorpions; and the Decoction of Cher-

vil, Chamomil and *Sperma Ceti* be us'd both inwardly and outwardly. If hard Labour occasion Wrinkles in the Belly, let it be anointed with a Liniment of the Oil of Nutmegs, *Sperma Ceti*, Saffron and Wax.

The remaining Disorders incident to Women in Child-bed, are the Milk-fever and acute Diseases. The occasion of the former is this. The nutritious Juice that was wont to be measur'd out for the Child in the Womb, stagnates in the Blood after Delivery, and about the fourth Day raises a feverish Thirst and Fermentation; by virtue of which 'tis precipitated into the Breasts, and converted into Milk, while the remaining Recrements are voided by a natural Sweat about the seventh Day. If this Fever be troublesome, 'tis alleviated by promoting the Flux of the *Lochia*, especially if the Woman does not design to suckle her Child; as the fix'd Salts with Diaphoretic Antimony and Myrrh, or gentle Sudorifics, will answer those who make account to suckle. In general there's nothing more friendly to Women in Child-bed, than continued breathing Sweats. If Anxiety and difficulty of Breathing attend this Fever, we must have recourse to the expelling Emulsions of the Seeds of Turneps, Columbines, *&c.*

If the Breasts be hard and molested with Pain, foment 'em with the Spirit of Sal-armoniac and the Essence of Saffron; and apply a Plaister of Saffron and Galbanum.

The acute Diseases of Women in Child-bed are for the most part malignant, and usher'd in by malign Symptoms. If a Fever is occasion'd by a Suppression of the *Lochia*, we must endeavour to recover their Flux. If the *Lochia* continue to run, we must be cautious of exhibiting strong Sudorifics against the Fever, for fear of occasioning an untimely Suppression. But withal remember to keep it within bounds, and restrain it if there be occasion, lest the Malignity should gain force by the excessive loss of Blood. In general, the Cure is perform'd by avoiding the least degree of Cold, and taking Sudorifics, such as Mineral Bezoar, Diaphoretic Antimony, Cinnabar of Antimony, the volatil Salt of Harts-horn, and the fixed Salts mix'd with Myrrh and Amber in case of a Suppression of the *Lochia*, or with Astringents when they exceed measure, exhibited in the Water of Swallows with Castor for a Vehicle. Purging, Clysters, Blooding and sweet Syrups are generally noxious; especially if the Fever be very malignant, attended by a tingling of the Ears, heaviness of the Head, difficulty of Breathing, *&c.* Tho' the Per-

Person be molested with Thirst, Acids ought to be cautiously us'd, by reason that they may provoke the Womb, or stop the Child-bed Flux. The Gelly of Harts-horn and Juice of Citrons, or the Tincture of Columbine and Blewbottle-flowers, and such like temperate Acids are the best. If the Person be frequently seiz'd with slight Shiverings, and little pricking Pains in the Back, 'tis a sign of miliar Eruptions, which if they be white are dangerous. Before their Eruption, absorbent Diaphoretics are proper; after appearance, Emulsions of the expulsive Seeds, the antiscorbutic Tincture of Coral, and the Essence of Myrrh, ought to be added.

SECT. IX.

Of Disorders relating to Suckling.

THE nutritious Juice that was wont to be measur'd out for the Child in the Womb, stagnates in the Blood when the Womb is empty'd and contracted. This Stagnation is follow'd by a Fermentation, or Milk-fever, and that by a Precipitation of Serum, which being strain'd thro' the Glandules of the Breasts, and thicken'd by their acid Ferment, is converted into Milk, and fitted for the Nourishment of new-born Infants. The Accidents which thwart Nature in this its Design, are such as either impair or over-multiply the quantity of Milk, or else deprave it.

Those which impair the quantity of Milk, are the artificial Compression, or preternatural Obstruction of the Glandules and Passages in the Breasts; the meagre dry Constitution of the Woman's Body; much Sweating, or the voiding large quantities of white Serum in the Child-bed Flux; drinking of acid Liquors, or austere Wine; Grief, Fear, Anger and Child-bed acute Diseases; to which we may add the want of a sucking Force in a weak Child. Now in order to supply Milk, we order juicy Food, and the Decoction of Elder-flowers in Milk, or that of Earth-worms and Fennel-seeds, for drink. The Seeds of Anis, Caraways and Dill, or their distill'd Oils, are also very proper. Prepar'd Crystal and Marle from Rocks, indirectly promote the increase of Milk, by subduing the Acid that thwarts it. Externally we order the Breasts to be rubb'd with a rough Cloth after eating,

ing, and fomented with the Decoction of Fennel-ſeeds, Marſh-mallows, Mint, and Elder-flowers in Milk; and anointed with the Oil of Worms, mix'd with a few drops of the diſtill'd Oil of Anis; and cover'd with a Cataplaſm of the Meal of Barly, Marſhmallows and Yeſt.

Contrary to this Symptom is the Redundancy of Milk caus'd by the Laxity of the Glandules in the Breaſts, or the over-acting of a volatil Acid which promotes the Precipitation. It is follow'd by a Diſtention of the Breaſts, Pain in the Back, Swelling of the Glandules under the Arm-pits, and ſometimes a Corruption of the Breaſts, if it ſtagnate there; or by an univerſal Weakneſs, if it be evacuated. If it coagulate and diſtend the Breaſts, we endeavour to promote its egreſs by ſucking, and applying the Plaiſter of *Sperma Ceti*, and above that, hot Bags quilted with Millet-ſeeds, Rice and Barly. If the Milk be free from coagulation in the Breaſts, we foment 'em with the Decoction of Mint, Hemlock, Cummin ſeeds, and Allum in Water and Vinegar; or apply Cataplaſms of the Pouder of Mint, Bread, Vinegar and Salt. Some commend the Juice of Plantane, and the Plaiſter of Hemlock. Internally we exhibit the cold Antivenereal Specifics.

Beſides the Deficiency and Redundancy of Milk, there remains yet another Diſorder relating to the ſame Claſs, *viz.* its Corruption or Curdling, occaſion'd either ſuddenly by the quick Retreat and Perturbation of the Animal Spirits thro' Grief and Fear, or gradually by its mixing with acid Lymph in the Glandules of the Breaſts, and lingring beyond its due time. The Symptoms of curdled Milk are the *unequal* Swellings of the Glandules of the Breaſts, at firſt free of Pain, but afterwards follow'd by a violent Heat, Redneſs, pinching Pain, and Inflammation that perhaps degenerates into Impoſthumes, Fiſtula's, Schirrus's or Cancers. The Cure, which ought to commence betimes, conſiſts in diſcuſſing the Swellings, and diſſolving the curdled Milk, or elſe promoting its Suppuration. The Diſcuſſion is obtain'd by giving inwardly *Sperma Ceti* to a dram; or Crabs-eyes and Myrrh, with Diaphoretic Antimony and fixed Salts; or the Pouder of Wood-lice to a dram; or the Spirit of Sal-armoniac to a dram; in order to ſweat. After ſweating we apply a large quantity of the Plaiſter of *Sperma Ceti*, and cover it above with hot Bags of Rice, Millet-ſeeds and Barly; or if that Plaiſter be ineffectual, that of Galbanum with Saffron cover'd in like manner, the Breaſt being bath'd twice a

Day

Day with a Mixture of the Spirit of Sal-armoniac, Essence of Saffron and ordinary Spirit of Wine.

If the Breasts be much inflam'd or seiz'd with St. *Anthony*'s Fire, the Woman is molested with feverish Shiverings, and a beating Pain in the middle of the Swelling. In this case let the Milk be forcibly suck'd; let the Decoctions of Mint and Chervil, with the above-mention'd Sudorifics, be administred; and Hony spread upon brown or blew Paper be apply'd to the Breasts. The Phlegm of Vitriol stripp'd of its Acidity, the Water of Frogs-spawn, and especially that of Quick-lime, are very useful for exernal Fomentation. Some order River-crabs bruis'd to be applied to the Breasts: But above all, a Cataplasm of the Meal of Beans, Lentils and Lupins, boil'd in Vinegar and Water, and mix'd with the Whites of Eggs, is most effectual. For St. *Anthony*'s Fire, let the Syrup of Elder spread upon a Linnen-cloth be applied to the Breasts, and renewed every Hour.

If Discussives prove successless, we must endeavour to ripen the Swelling, by bathing it twice a Day with Essence of Saffron and Spirit of Sal-armoniac mix'd; and applying *Mynsichtius*'s Plaister of *Galbanum* with Saffron mix'd with *Diachylon*. 'Tis usual to apply Cataplasms of the Juice of Smallage, Juice of Sheeps-dung, &c. But they generally create Pain. Perhaps the following Cataplasm may not be amiss.

Take of the Roots of Orris, rosted Onyons, of each three ounces; Yest, two ounces; Yelks of Eggs, in number three; fresh Hogs-tallow, half an ounce; Oil of Roses, Meal of Beans and Linseed, of each two ounces. Make a Cataplasm.

When the Swelling becomes soft, it ought to be open'd with a Lancet, because, tho' the Glandule and Fat be easily dissolv'd by the purulent Matter, yet 'tis not able to break thro' the Skin without insufferable Pain. After 'tis open, apply Tents cover'd with Balsom of *Peru*, or Oil of the Balsamin Apple, Oil of St. *John*'s-wort, or the common Digestive of Turpentine, Hony and Yelks of Eggs; or above all, the Oil of Man's Ordure. In case of a Fistula, wash it with the Decoction of Agrimony, Allum, and Myrrh, and apply the following Ointment.

Take of the Juice of Agrimony, an ounce; Aloes, Myrrh, Sarcocol, and plumous Allum, of each a dram. With Hony make an Ointment.

Often-

Often-times theſe Swellings elude the Operation both of diſcuſſing and ſuppurating Medicines, and become hard painleſs Scrofles or Schirrus's; the former ariſing from curdled Milk, the latter from clotted Blood fix'd by a powerful Acid, after the Inflammation. In this caſe Gum-ammoniac, Galbanum, the Plaiſter of Hemloc, and a Liniment of the Juice of Nightſhade with Lytharge are proper for external Application. If we are apprehenſive of their Degeneracy into a Cancer, a Cataplaſm of the Juice of Earth-worms, Pulp of rotten Apples, Turneps, Figs and Saffron, will not be improper. But if the Swellings begin to ſhoot and cauſe pain, they are not to be meddled with; as being near akin to Cancers.

Cancers in the Breaſt generally take their Riſe from hard Swellings, and are much incourag'd by the Suppreſſion of the Terms. When the Swelling ſhoots and pricks without a tendency to Suppuration; when it becomes hot and livid, and the Veins are ſwollen, we may reaſonably conclude upon a Cancer. Sometimes, but very rarely, it comes without any viſible precedent Cauſe, and appears firſt in the form of a littled red Knot, about the bigneſs of a Chiche, which by degrees increaſes, becomes livid and black, and the ſurrounding Veins ſwell up like ſo many Crabs-feet.

If a Cancer lies hid within its own Verge, and does not yet corrode the Skin and Subſtance of the Breaſts, it ought not to be tamper'd with. For a palliative Cure we apply Liniments which partake of Ceruſs and the Sugar of Lead, or a Plate of Lead, to the Breaſts. The Juice of the Prick-Thiſtle, call'd *Onopordon*, or of the Herb *Robert*, and the Juice or Water of rotten Apples, are alſo proper for external Applications. Note, all Compoſitions againſt a Cancer ought to be beaten and mix'd in a Leaden Mortar.

If a Cancer be ulcerated, and void corrupt Matter diſperſing its Venom round all the neighbouring Parts, it ought to be rooted out with a Knife, and the bleeding ſtopp'd with a fir'd Iron. *Allioth* pretended to cure it with Alcali's mix'd with Sulphur. But the former Method is moſt univerſally receiv'd. Some apply a living Crab which dies upon the Breaſt while the Virulency remains; and if it live, ſignifies the temperance of the Ferment. This Application they repeat till the Crab be able to live upon the Breaſt. Soot and Lime-water are alſo recommended for waſhing the Ulcers; as likewiſe the following Ointment. Take of the Juices of Golden Rod, Nightſhade, and Sow-thiſtle, of each an ounce;

Oil

Oil of Violets, and that of Roses, of each an ounce and a half. With Quick-lime make an Ointment in a Leaden Mortar.

The last Disorder relating to Suckling shall be that of the Nipples; when they are small and not open, or chopp'd and ulcerated. The former Inconvenience is amended by applying a Cupping-glass or a Glass-instrument fit for the purpose, and suckling a toothless Puppy. The latter is prevented by fitting an excavated Nutmeg to the Nipple, or anointing it with Hogs Tallow mix'd with common Bole, some time before Delivery. Its actual Cure is compass'd by anointing with Balsam of *Peru*, or Oil of Balsamin Apple mix'd with the Oil of Eggs. The Oil of Sugar, the Fat of Cockles, the Juice of the Herb *Robert*, and above all, the Juice of Woodlice express'd in Wine, are approv'd for the same purpose. Some apply ston'd Raisins, or the Leather of one's Shooe: But when the Chops are large, they ought to be washed frequently with warm Water to take off the stagnating Milk and Serum that corrupts and galls the Nipples; and then fomented with Plantain-water, in which Sugar of Lead is dissolv'd; and afterwards cover'd up with a Leaf of Ground-ivy. If they be ulcerated, wash them with Quick-lime Water; and anoint 'em with a Mixture of Litharge, Allum, Myrrh, and Oil of Roses.

I

AN

AN ABRIDGMENT OF ETMULLERUS HIS *Practice of* PHYSIC, *&c.*

BOOK V.

Of the Diſeaſes of Children.

IN the foregoing Sections we conducted the Child from the firſt Minute of Conception, to the Hour of Birth. It remains now to view its Circumſtances, when juſt launch'd into the World, and to provide ſuitable Relief. The firſt Alteration it undergoes, is occaſion'd by the free Air which rarifies and quickens the Blood and Spirits, and by conſequence provokes the Stomach, Guts, and Bladder to expulſive Contractions. Now in imitation of Nature's Efforts, 'tis the Duty of Art to promote theſe Evacuations by exhibiting ſmall quantities of a Mixture of ſolutive Syrup of Roſes, Syrup of Cichory with Rhubarb, and *Sala*'s Emetic Syrup; and feeding it with the Beeſtings projected by Nature for that purpoſe: For the Excrements lodg'd in the firſt Paſſages, are the curdled, acid, nutritious Juice barr'd from Evacuation 'till Child-birth; hence the voiding of 'em before Delivery is look'd upon as a Sign of a dead Child: And their undue ſtay after the Birth taints the Nouriſhment with a preternatural Acidity, and is in good meaſure

measure the Cause of all the tragical Symptoms that pursue our Infancy; upon which account we ought to be diligent in endeavouring their early removal.

Nor is the insensible Transpiration or Evacuation by the Pores of the skin to be neglected, as being so essential to Life. Now the slimy Crust fasten'd upon the Skin by the Liquor in the *Amnios*, deprives the Infants of this Benefit, and by imprisoning the Steams under the Skin exposes them to cuticular Eruptions. To remove this inconvenience the Nurse ought to bathe the Child very frequently in warm Water, in which Soap or common Lye is dissolv'd; and with a soft Cloth wipe off the impurities of the Womb.

As the undue Retention of Excrements is frequently the Cause of Childrens Diseases, so the Assumption of irregular Food is justly charg'd with the same Crime. The most of their Food is Milk from the Breasts, which is render'd disorderly several ways. As,

1. When 'tis not the Mother's own Milk. The nutritious Juice which the Child was acquainted with in the Womb, being converted into Milk, would be the most natural and easie nourishment; since Customary Food is always most easily digested. But forasmuch as the temperament of every Woman varies the Milk; that of a strange Woman must needs disagree with the nutritious Juice of the Mother, which the Child was wont to digest, and consequently causes several notable Alterations in its Body; especially considering that our Hackney Nurses are generally poor and inur'd to coarse Food, whereas the Mothers that hire them are intitled to a contrary Character.

2. The Milk of a sickly Woman, whether Mother or Nurse, is improper.

3. Fat thick Milk at first, is pernicious to the Child, and apt to curdle into an acid Crudity. Nature has wisely provided against this Consequence by the thin purgative Beestings that are calculated to prepare the Child's Stomac, and by degrees inable it to digest the thick elaborate Milk.

4. Nothing is more apt to disorder the Child than sucking it too often; since large quantities of Milk stagnating in the Stomac, must needs corrupt and occasion Crudities, especially if fresh Milk be pour'd in before the preceding be digested.

5. The Nurse's irregular Conduct does frequently vitiat the Milk. The least Error in Diet, tho' inoffensive to her, may taint the Milk and hurt the Child. Upon which account

count she ought to eat roasted Meat, and that moderatly and not over-charge her Stomac, as many are wont to do when they're transplanted from their own hungry Habitations to a fat Pasture. In particular, she ought to avoid Acids, Sweetmeats, Cheese, Wine, Summer-fruits, or whatever is apt to curde and clot the Milk. And as her Diet ought to be clean and regular, so she ought to preserve a calm disapassionat temper of Mind; since Fear, Anger, and Grief clot the Milk by diverting and withdrawing the Spirits that should keep up its equal temperature: Nay, the influence of Fear and other Passions is visible in the natural Marks that are intail'd to Children in the Mother's Womb, by the violent Motion of the Mother's Spirits determin'd upon one part; and (by the way) these Marks are cur'd by applying frequently a hot bloody Secundine, or Clouts dip'd in Menstrual Blood, and the touch of a dead Child's Hand. Some apply Clouts dip'd in the Blood of Toads, or *Fernelius's Aqua Divina*, or in case of extremity cut 'em off.

If Fear or Passion actually prevail and cause the Coagulation of Milk, let the deprav'd Milk be first suck'd out by a Puppy, and the Medicines recommended against the same Symptoms in the foregoing Book, be exhibited before the Child be admitted to suck. In general the curdling of the Milk is best prevented by eating Anise and Fennel seeds after Meals, and abstaining from cold drink, or avoiding any external Cold; especially by diverting the menstrual Purgation, and shunning the Emotions of Venery, which by curdling the Milk in the Child's Stomac frequently entail to it an Antipathy against Cheese, that being a natural resemblance of the curdled Milk that was wont to annoy it.

After the Child has suck'd about a year it ought to be weaned, especially a little after the Equinoxes, during the increase of the Moon. The chief Inconvenience Children are liable to, is drinking in the Nighttime, which swells their Belly, and occasions Looseneſſes and many other bad Symptoms. To prevent this, let the Essence of Wormwood be mix'd with their drink; or if these Evils prevail already exhibit a little Spanish Wine, and apply Aromatic Bags to the Belly. As for the other Food of young Children it ought to consist of white Bread dry'd and beaten small, Yelks of Eggs and Aniseed boil'd in Milk or Water to the Consistence of a thin Pulp. That which is commonly made of Flower and Milk or Water is fitter for Pas-

than any thing else; for it lies heavy in the Child's Stomac, and degenerats into a viscous tough Crudity; whereas the Bread being already fermented, is sooner and more easily digested. 'Tis customary among Nurses to attenuate the Child's Food in their own Mouths before they give it; and indeed 'tis true that a healthy Nurses Spittle is of use for promoting a quick digestion: But if scorbutic Salts be lodg'd in her Gums, or if a Cacochymy prevail in her Body, it is too apt a Vehicle for conveying a morbifical Tincture into the Child's Body.

These premises, if duly weigh'd, will furnish us with a distinct Idea of the Causes of Childrens Diseases. The Excrements retained and vicious Milk or Pap receiv'd into the Stomac, degenerat into an acid Crudity; which if imprison'd in a viscid Vehicle, displays its force within, and if diluted with a thinner Serum, breaks out upon the Skin in various Eruptions. From this Source it were easie to derive all the particular Diseases of Children; their violent Gripings, and voiding of discolor'd Excrements; the generation of Wind and distention of the Belly; Vomiting and Inappetency; Hiccough, Watchings, Convulsions; and the numberless Train of cuticular Eruptions, or aches on the Skin, occasion'd partly by the Efflux of a serous acid, and partly by a want of due transpiration which obliges it to stagnat in the out parts.

Now forasmuch as all these Diseases of Children are deriv'd from one Cause, and consequently demand the same Method of Cure, twill be needless to trace every distinct Symptom apart; and therefore we shall content our selves with a general Account of the Method of Cure. And indeed if the foregoing Hypothesis be duly considered and understood, 'twill be an obvious Consequence that the Basis of the Cure falls upon Alcalies, or such Medicines as discuss a viscid Crudity, and imbibe an acid.

These are; first, the volatil Alkalies, especially the Spirit of Sal-armoniac succinated, which tho' dreaded by some, is recommended by experience as an incomparable Medicine for Children. 'Tis given in the Mother's Milk, or in Mint or Fennel-water. To this Class we may join oily Aromatics, as Aniseed given in Pouder to half a dram; Castor, Myrrh, and *Elixir Proprietatis* prepar'd without Acids. In the second Rank we place the fix'd absorbent Alcalies, *viz.* Coral, Crabs-eyes, Pearl, Sea Horse-teeth, Ivory, Bezoar stone. To which we may add the Tincture of

Tartar,

Tartar, or that of the Droſs of the Regulus of Antimony; and *Venice* Triacle or Mithridate given to two grains; (ſtronger Narcotics and more generous Medicines being improper.) As for example.

Take of prepar'd Crabs-eyes half a dram; Hartſhorn prepar'd without fire, half a dram; prepar'd red Coral half a ſcruple; choice Myrrh, ſix or nine grains; *Venice* Triacle three or four grains; dikill'd Oil of Aniſe three or ſix drops. Make a Pouder. Or,

Take of Hartſhorn prepar'd without Fire a ſcruple; Crabs-eyes and red Coral, of each half a ſcruple; volatil Salt of Hartſhorn ſix grains; *Venice* Triacle four grains; choice Myrrh three grains. Make a Pouder, of which give a convenient quantity in Milk or Pap.

Take of Elder-flower-water two ounces; Spirit of Sal-armoniac fifteen drops; Hartſhorn prepar'd without Fire, the Jaw-bone of a Pike, and prepar'd Unicorn, of each half a ſcruple; Syrup of Poppies, two drams. Make a Potion to be given by little ſpoonfuls.

Now the acid Crudity being thus ſubdu'd and prepar'd, it remains only to make Proviſion for its Evacuation, firſt by Clyſters of the decoction of Chamomil-flowers, mix'd with Salt of Tartar, Honey of Rue, and Oil of Aniſe; or thoſe of Milk with Turpentin diſſolv'd by the Yelk of an Egg; or in a difficult Caſe, thus,

Take of the decoction of Carminative Ingredients with Salt of Tartar two ounces; *Sala*'s Emetic Syrup two drams; Honey of Roſes two drams: Make a Clyſter.

If a viſcid Slime ſtuff the Breaſt, we may exhibit for a Potion three drams of Hyſſop Water, half a dram of the Syrup of Tobacco, and a ſcruple of *Sala*'s Emetic Syrup mix'd; or half an ounce of Mint-water, with half a dram of the Emetic Syrup. As for Purgatives take what follows.

Take of the Solutive Syrup of Roſes two drams; prepar'd Crabs-eyes half a dram; prepar'd red Coral twelve grains: With a few drops of the Spirit of Anis make a Mixture. Or,

Take of the Pouder of Jalap ſix grains; Tartar vitriolat half a ſcruple. Make a Pouder.

Manna given to two or four drams in Breaſt-milk or Pap is alſo a good Laxative. But above all, ſweet Mercury is the moſt effectual Correcter and Evacuater of acid viſcous Humours, eſpecially upon the approach of the Small Pox or Meaſles. 'Tis given at the rate of a grain for every year of the Child's Age. As,

Take

Take of the Pulp of Raisins, half a dram; sweet Mercury, a grain and a half; Pouder of Jalap, three grains. Make a Bolus.

If Mercury be insufficient, Fulminatory Gold given to a Grain with Ivory and Pouder of Sea-horse Teeth, is a notable Medicine; especially if the first Passages be stuff'd. It operates more fiercely in wean'd Children than those that suck, by reason that the Milk tempers it.

These Medicines, if discreetly manag'd, will answer all Diseases in Children, particularly the Gripings they are so liable to, which are attended with a prodigious Unquietness, and voiding of clotted or green Excrements, or at least such as are first yellow, and afterwards become green by reason of the freer Effervescence of the curdl'd Acid with the Bile. These we cure by the above-mention'd Clysters, (or those of Milk when the yellow Excrements are thin and sharp) and Mixtures of aromatic Waters, volatil Salts and fix'd Alkalies; and when all prove ineffectual, by exhibiting a grain or two of *Aurum Fulminans* in black Cherry-water. Externally we anoint the Belly with the distill'd Oils of Mace and Anise mix'd with the express'd Oil of Nutmegs; or if the Matter be very viscous, with an Ointment made of Gum-ammoniac, Turpentin, Aloes, Hogs Tallow, fresh Butter, and distill'd Oil of Anise. If the Belly be distended by Wind, we exhibit the Pouder or distill'd Oil of Angelica-roots, Aniseed, red Coral, and the Water of the Oak of *Jerusalem*, and anoint the Belly with Oil of Chamomil, and distill'd Oil of Anise. If the Child vomit often, 'tis a Sign of a strong Stomach, and ought not to be stopt, especially if it proceed only from a Redundancy of Milk; but if the Milk be corrupted and the Matter discolour'd, we exhibit a Pouder made of Nutmegs, Coral, and Cloves; or Cinnamon-water, and distill'd Oil of Cloves. Externally we inject Clysters, and anoint the Belly and Stomach as above. Against the Hiccough Vomiting is proper; as also Aniseeds, *Venice* Triacle, and distill'd Oil of Cloves; or *Joel*'s Pouder of burnt Hartshorn and red Coral. For Costiveness which frequently causes the Distention of the Belly, difficult Respiration, and many other bad Symptoms, we order 'em Mouse-dung dissolv'd in Milk, or in case of extremity Sweet Mercury and *Aurum fulminans*. Externally we inject Clysters of Rape and Linseed Oils sharpen'd with the Extract of black Hellebor, or Suppositories of *Venice* Soap; or apply to the Belly rotten Apples with Goose-fat, and

Oil of Coloquintida; or in case of Extremity the Ointment of Sow-bread mix'd with Bull's Gall, and Oil of Coloquintida. Oftentimes the ſtagnation of ſharp Sweat, or the neglect of ſhifting the Child, galls the tender Skin under the Armpits or about the Genitals; then we order the Part to be firſt waſh'd with warm Water, and afterwards ſprinkl'd with the Precipitate of the Vitriol of Steel, mix'd with Chalk, Ceruſe, and Sugar of Lead. Sometimes much crying or coughing will force the Caul or one of the Inteſtines into the Navel-ſtring, and ſo diſtend the Navel, and relaxate the *Peritonæum*; againſt which Inconvenience we exhibit Aniſeed inwardly, and anoint the Navel with Oil of Eggs, or Bear's Fat mix'd with the Seed of Thorowteaſel; and with a Roller faſten upon it a round Ball of Maſtic and red Wax, or Turpentin. If the Navel be inflam'd, we anoint with Oil of Roſes mix'd with Ceruſe and Sugar of Lead, and apply the Plaiſter of *Sperma Ceti*. Sometimes crying, coughing, or much Wind in the Belly, occaſions a Rupture, which we cure by applying a Plaiſter of the Skins of pickled Eels boil'd to a Conſiſtence in Lye, and bathing with aſtringent vulnerary Decoctions. Sometimes a watry Tumour diſtends the *Scrotum*, and feigns a Rupture; this is cur'd by fomenting with the Juice of Goat's Dung, and applying the Dung it ſelf as a Cataplaſm. A *Teneſmus* or Down-falling of the *Anus* is cur'd by Fumigations of Pine-tree Roſin, Sarcocolla, Bay-berries, and Pennel-ſeeds, and applying Bags quilted with Mullein-flowers, Bran, Cummin-ſeeds, and Bay-berries. A Suppreſſion of Urine caus'd by a pituitous Humour in the Paſſage, is cur'd firſt by cleanſing the Body with Mechoacan and ſolutive Syrup of Roſes, and then exhibiting the Decoction of Vetches and Fennel-tops with ſome Drops of the Spirit of Turpentine, and Emulſions of Violet-ſeeds with the Water of Elder-flowers, or of Reſtharrow; and anointing the Pubes and *Perinæum* with Oil of Scorpions and that of Wax, or applying Cataplaſms of Chamomil roſted Onyons, and Oil of Scorpions. An Incontinence of Urine is removed by fomenting the Sphincter of the Bladder with aſtringent Decoctions, and giving inwardly Caſtor, Myrrh and Oxymel.

The Thruſh or Wheals that frequently beſet Children's Tongues, Throat and Stomach, (and ſometimes the Guts, as appears by ſcaly Excrements) are cur'd by waſhing 'em with Speedwel-water, and Juice of Turneps; or applying a Liniment of the Mucilage of Quinces extracted [illegible] Water

Water of Frogs Spawn, mix'd with the Juice of Houſeleek and Allum; or Honey of Roſes mix'd with the Spirit of Salt. If the Gums be putrify'd, gargle the Mouth with the Decoction of Chervil and Sage in Water mix'd with Honey and a little Vinegar.

Stubborn Watchings are frequently the Harbingers of an Epilepſie, and therefore ought to be obviated betimes by exhibiting gentle Laxatives, and Emulſions of Sweet-Almonds with abſorbent Powders. Perhaps *Venice* Triacle or Mithridate, and the Rinds of Poppy-heads boil'd in Milk are not amiſs; but the Preparations from Poppies are to be cautiouſly us'd if the Children be very young. Externally we bathe the Temples with the Nurſe's Milk mix'd with Saffron; and anoint the Breaſt and Pit of the Neck with an Ointment of expreſs'd Oil of Nutmegs, and the diſtill'd Oils of Rue and Amber. An Epilepſie is alſo uſher'd in by a ſtarting and frights in ſleep, occaſion'd by the violent Excurſion of the Spirits, which requires the ſame Cure as an Epilepſie. Now an Epilepſie for the moſt part ſeems to proceed from a provoking Acid in the Guts, and is cur'd by Alkalin Abſorbent Powders; ſuch as Cinnabar of Antimony, Unicorn's Horn, Cryſtal, Sea-horſe-tooth, and eſpecially Amber and Miſletoe of Hazel-wood, and the Powder of Moſs call'd *Wood Claw*. If theſe be inſufficient, we add to them the volatil Salt of Amber, or, which is yet better, the Spirit of Hartſhorn impregnated with Amber. But above all, the Sulphur of Antimony or Fulminatory Gold (each of 'em given to a grain) are the moſt effectual Medicines.

Convulſions are frequently caus'd by the breeding of Teeth, eſpecially the ſharp Eye-teeth; whoſe original ſoft Pulp, being harden'd about the ſixth or ſeventh Month, begins to force its Paſſage through the Gums, and conſequently irritates the nervous Syſtem, contracts the ſalivating Glandules, and occaſions that obſervable Heat and Efflux of Serum to the Mouth, and the Inflammation of the adjacent Parts. This Symptom is cur'd by keeping the Belly open, and applying to the Gums the Mucilages of Fleawort and Quince-ſeeds, extracted with the Water of Frogs Spawn, mix'd with Oil of Sweet Almonds and that of Poppies; or the Brains of a Hare boild to the Conſiſtence of a Liniment with Honey. Some recommend the Blood of a Cocks Comb for the ſame uſe. Externally we anoint the Cheeks with emollient and diſcuſſive Oils. If the ſwelling of the Gums begin to appear white in the middle, it may

be cut with a Knife, to make way for the Tooth. Sometimes Children are troubled with Swellings upon the Gums, that are not caus'd by Teeth, and then they cry, if the Region of their Ears be touch'd. This Symptom is allay'd by anointing the Swellings with the Oil of Sweet Almonds, and the Region of the Ears with the fat of Hares.

A Looseness is frequently caus'd by the defect of *Saliva* following the breeding of Teeth, as also by the thinness or watryness of the Nurse's Milk. It ought not to be stop'd at first; but if it last above six days, or if the Excrements be sharp, green, or black, and the Appetit dejected, a speedy Cure must be indeavour'd by absorbent Pouders, and the common Specifics against a Looseness.

Worms in the Guts are frequently the Authors of the Epilepsie, Feaver, Unquietness, *&c.* that molest Children. They are discovered by these Symptoms. The Child's Mouth is always full of *Saliva*, especially in a Morning, while the Stomac is empty; it rubs its Nose and gnashes with its Teeth while asleep. Its appetite is uncertain, sometimes voracious, tho' followed by leanness; and sometimes very low; the Belly sometimes sinks, and sometimes is much inlarged. The Face is liable to frequent Flushings, and Alterations of Colour; the Belly is for the most part open and much grip'd. The Seeds of these Worms are convey'd into the Body in the Child's Food, especially in Corn or Bread. Sweet Mercury and the Conserve of Peach-flowers, interlac'd with the bitter Specifics, absorbent Pouders and volatil Alkalies compass the Cure. Sometimes a Worm settles its self within the Navel-string, and causes a paleness of the Lips, wasting of the Body, and unquietness; 'tis kill'd by applying to the Belly the inner Shell of a Walnut fill'd with the Pouder of *Venice* Glass, and that of Saffron; and then it ought to be purg'd out.

Children are frequently troubled with a Cough which proceeds for the most part from the Stomac. If it be a wet Cough, Vomits are absolutely necessary. If dry, the Spirit of Hartshorn succinat, the Spirit of Sal-Armoniac, *Sperma Ceti*, the Mucilage of Linseed, Figgs soak'd in Spirit of Wine, the Juice of Rapes, and Pulp of Raisins join'd to gentle Anodynes, are noted Specifics. If the Cough be convulsive, we exhibit Castor and the Spirit of Amber. If the matter be very thick, the Juice of Horse-Radishes, or of Fennel, the Syrup of Hyssop or that of Tobacco, and *Sala's* Emetic Syrup, are very proper. Externally

ternally in a dry Cough we wash the Child's Feet in hot Ale, and anoint them with the Goats Tallow. If a plentiful Defluction attend the Cough, we cover the Head with Cotton fumigated with Amber, Frankincense, and the Gum of the Juniper-tree. If the Child's Nose is stopp'd, put into it a Clout wet with Marjoram and black Cherry-water impregnated with white Vitriol, and anoint the Nostrils with the Oil of sweet Almonds mix'd with a few drops of the Oil of Marjoram.

The Acidity of the Lymph, caus'd by the Crudities in the Stomach, frequently occasions an Obstruction and Swelling of the Glandules about the Ears, Neck and Head; and a milky Crust or scaly Eruption in the Head and Face, which in process of time, if the Acid be very sharp, degenerates into Ulcers voiding corrupt Matter. If this Eruption be unseasonably suppress'd, it occasions a Cough, Looseness, Convulsions, and many other bad Symptoms. For cure; internally we exhibit Purgatives, especially sweet Mercury; and absorbent Pouders, together with volatil Spirits. Externally we anoint the crusty Eruptions with Oil of Tartar *per Deliquium* and Camphyr, and bathe 'em with the Decoction of Dock-roots, Marshmallows, Soap-wort and Celandine in small Beer or Child's Urine; and cover the running Ulcers with the Pouder of the Precipitate made from Vitriol of Steel, and mix'd with Calaminar Stone, Chalk, Cerus, Salt of Tartar and Myrrh; and apply discussive Plaisters to the swell'd Glandules. When the Evil is inveterate, and the Ulcers are become fœtid, 'tis customary to wash 'em with the Decoction of Tobacco, and mix Quick-silver with the Ointments, or order a Girdle of Quick-silver kill'd with Hog's Fat: But these Applications are not always safe. *Panarollus*'s Ointment of Sulphur, Juice of Lemons and Hog's Fat; or that of the Yelks of Eggs boil'd hard with Myrrh, black Hellebor, Cuckou-pint, and Snake-weed-roots, are preferable. If the Skull be corroded by the Ulcers, we apply Honey of Roses mix'd with the Spirit of Wine; and the Pouder of Birthwort mix'd with Balsam of *Peru*. If the Child's Head be lousie, apply the Oil of Spike and Pouder of Staveacre over night, or the Juice of Wormwood mix'd with Quick-silver; or, which is yet safer, the Precipitate of Mercury prepar'd with the Spirit of Nitre; washing it next Morning with a Lee of the Decoction of Lavender and Spike.

be cut with a Knife, to make way for the Tooth. Sometimes Children are troubled with Swellings upon the Gums, that are not caus'd by Teeth, and then they cry, if the Region of their Ears be touch'd. This Symptom is allay'd by anointing the Swellings with the Oil of Sweet Almonds, and the Region of the Ears with the fat of Hares.

A Looſeneſs is frequently caus'd by the defect of *Saliva* following the breeding of Teeth, as alſo by the thinneſs or watryneſs of the Nurſe's Milk. It ought not to be ſtop'd at firſt; but if it laſt above ſix days, or if the Excrements be ſharp, green, or black, and the Appetit dejected, a ſpeedy Cure muſt be indeavour'd by abſorbent Pouders, and the common Specifics againſt a Looſeneſs.

Worms in the Guts are frequently the Authors of the Epilepſie, Feaver, Unquietneſs, &c. that moleſt Children. They are diſcovered by theſe Symptoms. The Child's Mouth is always full of *Saliva*, eſpecially in a Morning, while the Stomac is empty; it rubs its Noſe and gnaſhes with its Teeth while aſleep. Its appetite is uncertain, ſometimes voracious, tho' followed by leanneſs; and ſometimes very low; the Belly ſometimes ſinks, and ſometimes is much inlarged. The Face is liable to frequent Flushings, and Alterations of Colour; the Belly is for the moſt part open and much grip'd. The Seeds of theſe Worms are convey'd into the Body in the Child's Food, eſpecially in Corn or Bread. Sweet Mercury and the Conſerve of Peach-flowers, interlac'd with the bitter Specifics, abſorbent Pouders and volatil Alkalies compaſs the Cure. Sometimes a Worm ſettles its ſelf within the Navel-ſtring, and cauſes a paleneſs of the Lips, waſting of the Body, and unquietneſs; 'tis kill'd by applying to the Belly the inner Shell of a Walnut fill'd with the Pouder of *Venice* Glaſs, and that of Saffron; and then it ought to be purg'd out.

Children are frequently troubled with a Cough which proceeds for the moſt part from the Stomac. If it be a wet Cough, Vomits are abſolutely neceſſary. If dry, the Spirit of Hartſhorn ſuccinat, the Spirit of Sal-Armoniac, *Sperma Ceti*, the Mucilage of Linſeed, Figgs ſoak'd in Spirit of Wine, the Juice of Rapes, and Pulp of Raiſins join'd to gentle Anodynes, are noted Specifics. If the Cough be convulſive, we exhibit Caſtor and the Spirit of Amber. If the matter be very thick, the Juice of Horſe-Radiſhes, or of Fennel, the Syrup of Hyſſop or that of Tobacco, and *Sala*'s Emetic Syrup, are very proper. Externally

ternally in a dry Cough we wash the Child's Feet in hot Ale, and anoint them with the Goats Tallow. If a plentiful Defluction attend the Cough, we cover the Head with Cotton fumigated with Amber, Frankincense, and the Gum of the Juniper-tree. If the Child's Nose is stopp'd, put into it a Clout wet with Marjoram and black Cherry-water impregnated with white Vitriol, and anoint the Nostrils with the Oil of sweet Almonds mix'd with a few drops of the Oil of Marjoram.

The Acidity of the Lymph, caus'd by the Crudities in the Stomach, frequently occasions an Obstruction and Swelling of the Glandules about the Ears, Neck and Head; and a milky Crust or scaly Eruption in the Head and Face, which in process of time, if the Acid be very sharp, degenerates into Ulcers voiding corrupt Matter. If this Eruption be unseasonably suppress'd, it occasions a Cough, Looseness, Convulsions, and many other bad Symptoms. For cure; internally we exhibit Purgatives, especially sweet Mercury; and absorbent Pouders, together with volatil Spirits. Externally we anoint the crusty Eruptions with Oil of Tartar *per Deliquium* and Camphyr, and bathe 'em with the Decoction of Dock-roots, Marshmallows, Soap-wort and Celandine in small Beer or Child's Urine; and cover the running Ulcers with the Pouder of the Precipitate made from Vitriol of Steel, and mix'd with Calaminar Stone, Chalk, Ceruss, Salt of Tartar and Myrrh; and apply discussive Plaisters to the swell'd Glandules. When the Evil is inveterate, and the Ulcers are become fœtid, 'tis customary to wash 'em with the Decoction of Tobacco, and mix Quick-silver with the Ointments, or order a Girdle of Quick-silver kill'd with Hog's Fat: But these Applications are not always safe. *Panarollus*'s Ointment of Sulphur, Juice of Lemons and Hog's Fat; or that of the Yelks of Eggs boil'd hard with Myrrh, black Hellebor, Cuckou-pint, and Snake-weed-roots, are preferable. If the Skull be corroded by the Ulcers, we apply Honey of Roses mix'd with the Spirit of Wine; and the Pouder of Birthwort mix'd with Balsam of Peru. If the Child's Head be lousie, apply the Oil of Spike and Pouder of Staveacre over night, or the Juice of Wormwood mix'd with Quick-silver; or, which is yet safer, the Precipitate of Mercury prepar'd with the Spirit of Nitre; washing it next Morning with a Lee of the Decoction of Lavender and Spike.

This Acidity of the Lymph, proceeding from curdled Milk in the Stomach, is also the cause of the small Pox and Measles. They are usher'd in by a dry Cough, a watrineſs and swelling of the Eyes, and itching of the Nose. So soon as we can discover their approach, we exhibit sweet Mercury with a grain of the Pouder of Jalap; or if the Strength be much impair'd, and the Heat be violent, the Sulphur of Antimony precipitated from the Dross of the Regulus. If the Belly be swoln and infested with Noise, we inject gentle Clysters. After the Ebullition is over, we administer the Emulsions of the out-striking Seeds with Castor, Myrrh, diaphoretic Antimony, Cinnabar of Antimony, fix'd Salts, absorbent Pouders; and the Juice of Horse-dung. If the Malignity of the Humours cause Convulsions, we add the volatil Salt of Amber, and the succinate Spirit of Hartshorn. If the Child be very restless, we may venture to give a small quantity of the Syrup of Poppies. If a Vomiting attend the beginning of the Disease, we ought not to stop it, unless it prove excessive, and then we give *Venice* Treacle and *Laudanum Opiatum*; or rather the Spirit of Hartshorn succinate. To prevent a Looseness, which in this case is fatal, let the Nurse and Child both drink the Decoction of Viper-grass with the Gelly of Hartshorn. As for the other Symptoms that generally accompany this Disease, see the first Book.

Often-times the Child is emaciated, and does not thrive, and that chiefly upon three accounts. 1. When the Nurse's Milk is stale and sharp. In this case we change the Nurse, and bathe the Child in Goats-milk, and exhibit the Water distill'd from Ivy, or that from Fern. 2. When Worms exhaust the nutritious Juice. Besides those in the Intestines treated of already, there are others like little Hairs, that sculk under the Skin, especially about musculous Places, which not only exhaust the Nourishment, but continually gall and gnaw the Skin. They are cur'd thus; Bathe the Child in warm Water or Lee, in which Chickens Dung is boil'd, and rub the Body over with Hony, to tempt the Worms to come out in the form of black Hairs. Then scrape 'em off with a Cruſt of Bread made sharp like the Edge of a Knife. After this has been practis'd three or four times, bathe 'em in Wormwood-water in which Aloe is dissolv'd, or in the Decoction of Quicksilver. Inwardly, the Tinctures of Antimony, Essence of Myrrh, and Salt of Vipers are proper. 3. When the Glandules of the Mesentery, or milky Vessels

are stuff'd with viscid Crudities, and deny a passage to the Chyle. This we discover by the Hardness and Distention of the Belly, the Viscidity and Whiteness of Excrements; and cure it by the above-mention'd volatil attenuating Ingredients. To which we may add the Tinctures of Steel, the Tincture and Salt of Tartar, and, after the Child is wean'd, *Arcanum Duplicatum*. Externally we anoint the Belly with the Ointment of Sowbread, Ointment of Marshmallows, Gum-ammoniac and Oil of Chamomil.

The Fevers that Children are liable to, are also owing to the corrupt Crudities in the first Passages, which defile the Blood. Their cure is perform'd by answering the various Indications according as the infirmity of Children will admit, and the nature of the Fever requires. In general, Laxatives and absorbent Pouders accomplish the Design.

AN ABRIDGMENT OF ETMULLERUS HIS *Practice of* PHYSIC, *&c.*

BOOK VI.

Of Surgery.

SURGERY is that Part of Physic which affords manual Relief to the external Disorders of the Body. But 'tis not necessary for a Physician to be nicely acquainted with all the particular Directions for the Hand, that being a Province peculiar to Surgeons: So that our present Business amounts no further than to account for a Physician's Duty in regulating the Method of external Applications and inward Administrations. This we project to do under five Heads, *viz.* those of *Swellings*, *Wounds*, *Ulcers*, *Dislocations*, and *Fractures*.

But before we launch into Particulars, 'twill not be improper to take notice of the Distinction of the Parts of the Body into those that are hard or bony, and others that are soft. The former are frequently injur'd by applying oily Fat things which injoy a latent Acidity prejudicial to the Bones. The latter are either sanguine or spermatic. The sanguine are originally nourish'd with Blood, and all Tumours, Wounds, Ulcers, or Amputations relating to them, are neither

ther so painful, nor so easily provok'd and irritated by sharp Medicines, nor so difficult to cure; as those of the spermatic or nervous parts, which are nourish'd from the beginning with Chyle and nutritious Juice.

Now when any of these parts suffers external Injury, we must endeavour to allay the Pain and Symptoms that attend it, to preserve the natural Course of the Blood and Humors, and remove the putrifying acid Ferment that annoys the Part.

CHAP. I.

Of Swellings.

A Swelling is the Enlargement of the Dimensions of any part. It may be caus'd by Dislocation or Wind; but for the most part it owes its being to Humors. For, if the Blood or Serum stagnate, the former causes Inflammations, the latter soft white Swellings: If the thinner Humors force their Passage, while thick viscous Excremeuts stick by the way, they gather into a Body by degrees, and so cause Tumours, such as the critical Swellings that succeed to Feavers, to the Plague, and French Pox, and the hard Tumours of Glandules. If the nutritious Humour of any part is corrupted by a vitious Ferment residing in it, or otherwise occasionally alter'd, it degenerats into Impostthumes, Ulcers, Callous Tumours and Excrescences. And if the nutritive Juice be too plentifully receiv'd into any part, it produces the like effects.

The remote Causes are the straitness of the Passages occasion'd by Constriction, Compression, or painful Contractions of the Fibres; the viscidity and thickness of the Humour; the disproportion of its Particles; the Influence of an acid Ferment; the extraordinary distention of the Pores giving entrance to large Quantities of nutritious Juice, &c.

The Swellings are cur'd by retrieving the natural Motion of the stagnating Humours; or by Discussion, Suppuration, or artificial opening. Discussion is proper for sanguine Tumours, and is accomplish'd by applying volatil attenuating Ingredients, which temper the congealing Acid, and dissipat or exhale the Humour. Suppuration is the Effect of a mutual Effervescence betwixt the alkalin oily parts, and the Acid, which precipitats 'em into a white Pus; but

if

if the Acid be predominant, the Tumour either degenerats into a Schirrus, or breaks the Skin without Suppuration. Upon which account all ripening Ingredients ought to be juicy and balmy, for tempering the Acid, and unbending the Fibres of the part. Hence volatil Remedies which diſſipate the thin and ſo condenſate the thick Humours, and thoſe of an acid quality, are improper. Indeed if nature be inactive, and the Humour be very thick, 'twill ſometimes be uſeful to join ſome ſharper Ingredients to the ordinary Medicines. If the Swelling cannot be forc'd to Suppuration, it ought to be open'd by a Launcet, or by a potential Cauſtic of the Lee of Soap, or of the Butter of Antimony, or of *Magnes Arſenicalis*, which if well manag'd is an admirable Cauſtic, and cauſes no pain.

The Medicines which unlock and ſet at liberty the ſtagnating Humour, are 1. Emollient, ſuch as Marſh-mallows, Pellitory of the Wall, Melilot, Fenugrec, Linſeed, white Lillies, Figs, recent fat of female Animals, Mucilages, Oils, *&c.* 2. Attenuating as well as Softening. Such are Smallage, Elecampane, roſted Onyons, St. *John*'s-wort, Saffron, Chamomil and Elder-flowers, Turpentin, liquid Storax, Gooſe Fat, Goats Tallow, Gum Tacamahac, *Sperma Ceti*, Oil of Dill, Oxymel of Squills, *&c.* 3. Diſcuſſive and in ſome meaſure Diaphoretick; ſuch are Briony, wild Cucumbers, crude Onyons (Note, the roſting ſtrips them of their volatil Salt) Sallow-wort, Sowbread, Tobacco, Squills, Savin, Muſtard-ſeeds, Gum Ammoniac, a Swallow's Neſt, the Urine and Dung of Animals, Spirit of Urin, Spirit of Sal-armoniac, Yeſt, Oil of Scorpions, Oil of Bricks, Oil of Turpentin, Oil of Worms, the Plaiſter *Oxycroceum* or of Ammoniac, or of Hemlock, a Plate of Lead cover'd with Mercury, the Ointment call'd *Martiatum*, *&c.* Theſe Ingredients yield us Liquors for Fomentation, Cataplaſms, Ointments and Plaiſters. As,

Take of the Roots of Marſh-mallows, and white Lillies, of each an ounce and half; the Leaves and Flowers of Mallows and Melilot, and Elder-flowers, of each a handful; fat Figs, in number ſix. Boil them in Whey or Goats Milk. And to a Pound and a half of the ſtrain'd Decoction add of the recent Juice of Onyons, or Oil of Chamomil three ounces. Mix and foment the part.

Take of the Roots of Marſhmallows, three ounces; Roots of the *Flower-de-luce*, an ounce; Cole-wort, Mallows, and Wormwood-leaves, of each a handful; Chamomil and Melilot

lilot-flowers, of each half a handful; Linseed, an ounce and a half: Bruise them, and boil them in Whey or Milk. Then beat the Pulp thro' a Sieve, and add to it of Horse-dung, three ounces; Oil of Chamomil, an ounce and a half; roasted Onyons, two ounces. Make a Cataplasm. Common Soap dissolv'd in hot Milk is also very proper.

Take of the Mucilages of Marshmallow and Fenugreek-seeds extracted with the Decoction of Figs, of each an ounce; Goose Fat, six drams; Oil of Chamomil and Oil of white Lillies, of each half an ounce. Mix, and add of the distill'd Oil of Turpentin a dram; stinking Oil of Tartar, a scruple. Make a Liniment.

Take of the Plaister of Henbane, two ounces; Gum Ammoniac, dissolv'd with a gentle Heat, an ounce. Mix, and make a Plaister.

The discussive Ingredients are endow'd with volatil subtil hot Parts, qualify'd for subduing the acid, melting down the thicken'd Humour, and opening the Pores. Such are the Roots of Fennel, Elecampane, *Flower-de-luce*, Birth-wort, Pellitory of *Spain* and Ginger; the Leaves of Dill, Chervil, Rosemary, Marjoram, Calamint, wild Marjoram, Lavender and Hyssop; the Flowers of Roman Chamomil, Lavender, Rosemary and Saffron; Juniper and Bay-berries; the Seeds of Cummin, Anise, and Caraways; all the Spices, Castor, Storax, the Spirit of Wine camphoris'd, the Essences of Aromatic Plants, their distill'd Oils, *&c.* The Decoctions of such Ingredients are us'd both for Fomentation and Fumigation; Cataplasms, Liniments, and Plaisters, are likewise in use, but care is to be taken that no oily Ingredient stop the Pores of the Skin.

The ripening Ingredients ought to be, 1. Moist and juicy, for dissolving the two combatant Salts that promote Suppuration. 2. Oily and temperate; and 3. Indow'd in some measure with a penetrating Virtue in opposition to the fix'd Acid. Such are Marshmallow-roots, white Lillies, roasted Onyons and Garlic; the Emollient Seeds, Flowers, Oils, Ointments, Plaisters, *&c.*

The general Doctrine of Tumours being thus premis'd, we proceed to the Description of particular Swellings, which we draw up in four Heads. 1. Those that proceed from the Stagnation of Blood. 2. Such as are Critical. 3. Such as arise from the Depravation of the Lymph; and 4. Those which relate to the Blood-Vessels.

1. Under

1. Under the firſt Head we comprehend Inflammations, Blood-ſhot and St. *Anthony*'s Fire. Inflammations are cur'd thus: Inwardly we exhibit the ſame Medicines as we preſcrib'd for a Pleuriſie; to which we add Nitre, by reaſon of the Fever that accompanies 'em. Externally we firſt bleed; and then endeavour to diſcuſs 'em by applying the Decoction of Sulphur in Urine, and the Plaiſter of *Sperma Ceti*, or the Juice of River-crabs and Horſe-dung; or the Spirit of Wine camphoriz'd, mix'd with gentle Diaphoretics, and the Water of *Sperma Ceti*; or Quick-lime Water with Sugar of Lead; or the Lee of the Aſhes of Vine-twigs mix'd with Vinegar, Nitre and Salt. If theſe do not ſucceed, we muſt endeavour to bring the Swelling to a head, by applying Milk, in which Caſtle-ſoap is boil'd. But if the Inflammation and Heat be great, we muſt avoid oily fat Ingredients. If the Inflammation be ſpurious, that is, if a pituitous Humour accompany the ſtagnating Blood, we may add Ripeners of the ſharper kind. Generally the Plaiſters of Melilot and Diachylon, ſoften'd with the Oil of Lillies, or Ointment of ſweet Almonds, are very proper. After the Swelling is open, apply the Balſam of Sulphur and Plaiſter *Diaſulphuris*, or an Ointment of Turpentin, Honey of Roſes, and Balſam of *Peru* diſſolv'd in the Yelk of an Egg. If the Ulcers are deep and hollow, inject the Decoction of Tobacco and Plantain, mix'd with Myrrh and Aloes, or temper'd with Lime-water and the Spirit of *Venice* Triacle. Some are wont to apply Aſtringent Cataplaſms and Plaiſters in the beginning of an Inflammation, in order, as they fancy, to hinder the irruption of the Blood; but the Rules of Circulation have diſcover'd their Miſtake.

Blood-ſhot is the Effect of Contuſions, or of the Diſtortion of the Capillary Veſſels. Its internal Cure is the ſame as that of a Pleuriſie. Externally we apply a Slice of raw Beef; or *Venice* Triacle mix'd with the Syrup of Elder, Sugar of Lead, and Salt of Wormwood. If theſe prove ſucceſsleſs, we muſt have recourſe to Cataplaſms of the Roots of *Solomon*'s Seal and Comfry, bruis'd and boil'd in Wine; or to the Spirit of Wine camphoris'd and the Spirit of Sal Armoniac. If a nervous Part be affected by the Contuſion, we exhibit the Oil of Lavender inwardly, and anoint the Part with the Balſam of *Peru* mix'd with Spirit of Wine and Oil of Caſtor. If the Symptom do not diſappear after theſe Applications, we muſt endeavour to ſuppurat, and after Suppuration conſolidate as above. But when the Part

Part quickly becomes black, and threatens a Gangrene, or when the Contusion is deep and reaches beyond the Cuticle, 'tis not safe to stay for Maturation; therefore we scarifie it, and then apply Aromatic Decoctions, or Lime-water sharpen'd with the Spirit of Wine and sweet Mercury.

St. *Anthony's* Fire is an Inflammation incident to scorbutical Persons, and seems to proceed from a subtil volatil Acid, that ferments with the volatil Salt of the Blood, and causes it to stagnat. 'Tis usher'd in by shivering, and attended by a notable Heat and Fever. Its colour is very red; when touch'd it becomes white, but quickly reassumes its redness; It spreads over the neighbouring Parts, and is apt to degenerat into sordid Ulcers or Gangrenes. When it besets the Arms, 'tis more troublesome than in the Legs: If it strike in, or seize the Head, Face, Mouth, or Fundament, 'tis very dangerous. Its internal cure is accomplish'd by the Water, Essence, and Syrup of Elder-flowers, mix'd with the volatil Salt of Hartshorn or that of Amber, Camphyr, Sugar of Lead, Diaphoretic Antimony, Cinnabar of Antimony, and absorbent Pouders. Purgation before the Declension is absolutely pernicious; as also Bleeding, unless the Disease be occasion'd by a Contusion, Fracture or Wound. Externally, cold, astringent, oily and fat Ingredients are hurtful; the more proper Medicines are the Decoctions of Elder-flowers in which *Venice* Triacle and Castle-soap are dissolv'd; the Spirit of Wine impregnated with Camphyr or Saffron; the Decoction of Myrrh and Frankincense in Wine, mix'd with Camphyr and Saffron; the Water of *Sperma Ceti*, and that of Cow's Dung distill'd in *May*; the bruis'd Leaves of Radishes applied as Cataplasms; Clouts dipp'd in Hares-blood, or the first Flood of a Virgin's Terms; the Leaves of Arsmart bruis'd and applied; the Pouders of Myrrh, Frankincense, Chalk, Sugar of Lead and Camphyr, sprinkl'd upon brown Paper dipp'd into the Spirit of Wine impregnated with Saffron. To all which we may add *Laudanum Opiatum*, as occasion requires. The following Ointment is also much approv'd.

Take of the Pouder of Elder-flowers, three drams; Cerus, a dram and a half: With Salt of Wormwood, and *Venice* Triacle make an Ointment. The Ointment of Sugar of Lead and Syrup of Elder, is likewise of noted Efficacy.

If notwithstanding these Precautions, the Swelling be exulcerated, apply the Water of Quick-lime prepar'd with Elder-flowers, and mix'd with the Juice of Cresses, Sugar of Lead and Cerus.

2. Under

2. Under the second Head, *viz.* Critical Swellings, we comprehend *Bubaes*, Swellings of the Glandules behind the Ears, the fiery Botches call'd *Carbuncles*; those call'd *Furunculi*, *Phymata*, and *Phygilta*; and Swellings in the Fingers call'd *Paronychia*, and Chilblains in the Hands and Feet.

A Bubo is a Swelling in the Groin or Arm-pits. If it lie deep, low, and flat, 'tis very dangerous. If it accompany pestilential Fevers, we ought to promote its Suppuration, by avoiding Purgation and Bleeding; exhibiting Sudorifics; and applying externally Cataplasms of the Juice of Celandine, mix'd with *Venice* Triacle, Soot, and roasted Onyons and Garlic; or Toads dry'd and soak'd in Wine. If the Skin be thick and the Swelling obstinat, we apply a blistering Plaister, and when the Blister is open, *Sala's Magnes Arsenicalis*, which will extract the Malignity in the form of a Crust. After this Crust is remov'd, we cleanse the Ulcer with a Mixture of the Balsam of Sulphur, Ointment Basilicon and *Venice* Triacle. Venereal Bubo's are accounted for above.

The Critical Swellings behind the Ears ought to be brought to a Head when they accompany malignant Fevers, by ripening Cataplasms and Plaisters. To which, if the Swellings are very hard, we add Gum. Ammoniac dissov'd in Vinegar, and the stinking Oils of Guajacum and Tartar. When the Swelling is ripe, it ought to be open'd and cleans'd.

Carbuncles are very malignant Swellings, caus'd by a sharp, caustic, lixivious Salt, separated from the Blood, which creates a bitter Heat and Pain, mortifies and blackens the Part, and occasions a crusty Ulcer, like those that follow the Application of potential Cauteries. This Ulcer is sometimes usher'd in by little whitish or livid Pushes; and is always surrounded with a red or livid Circle, according as the adjacent Parts are more or less mortified. 'Tis cur'd thus: Apply the Butter of Antimony to the middle of the Ulcer, and make a Circle with it round the mortified Part: So the corrupt Part will fall off, and the further Progress of the Mortification be prevented. In the room of the Butter of Antimony, some choose to apply *Sala's Magnes Arsenicalis*, the Part being first prepar'd by a blistering Plaister. *Valeriola* orders it to be scarify'd, and then he applies the following Cataplasm.

Take of the Juices of Comfry, Scabious and Marygold of each an ounce; *Venice* Triacle, three drams; common Sal

Salt, a dram, and two Yelks of Eggs. Mix for a Cataplasm: which separats the Crust, and prepares the Ulcer for being cleans'd first by *Unguentum Ægyptiacum*, then by the Oil of Eggs, the Balsam of Sulphur, and the Plaister *Diachylon* with Gums. In the mean while we administer internally Antimonial Sudorifics mix'd with Acids.

The Swellings call'd *Furunculi* are the red, hot, pointed Botches appearing in glandulous parts. They are cur'd by promoting Suppuration, and avoiding Repulsives; as likewise those call'd *Phymata*; which are round glandulous Swellings, flat in the lower part, and pointed like a Plant in the upper. Those styl'd *Phygeltons* are hard glandulous Swellings resembling a Mushroom adhering to a Tree. They are cur'd by applying discussing Medicines mix'd with softning and anodyn Ingredients.

The Swelling call'd *Paronychia* is a painful Tumor of the Joints of the Fingers, sometimes fix'd, sometimes wandring from one Joint to another. The Cause is a sharp corrosive Humour collected about the roots of the Nail, where it gnaws the *Periosteum* and Tendons, and so causes Inflammations, Impostumes, and sometimes Gangrenes. For Cure, we administer Mercurial Purges, and apply the Spirit of Earthworms, Balsam of Sulphur and the Plaister *Diachylon*; or a Liniment of Earwax, Sugar of Lead, and the express'd Oil of Filberts. Some order the Finger to be put into a new laid Egg while 'tis hot, or into a Dunghil, and held for some time. Sometimes 'tis necessary to lay the Swelling open, and then apply to it *Venice* Triacle dissolv'd in Wine: And for a defensive to the whole Hand, a Liniment of the Ointments *Populeum* and *Album Camphoratum* mix'd with Opium and *Venice* Triacle.

The Chilblains or Kibes are whitish Swellings in the Hands and Feet, apt to become blewish, and sometimes to ulcerat. They are generally occasion'd by Cold, and are cur'd or prevented by applying Rock-Oil, or the distill'd Oil of the Pine-tree, or the distill'd Oil of Turpentine mix'd with the express'd Oil of Rapes. Some order the part to be rub'd Morning and Evening with Ice or cold Snow, and to be wash'd with the Decoction of frozen Rapes; or with the Spirit of Wine camphoris'd, or impregnated with Strawberries or Saffron. If the parts are much injur'd, we apply Cataplasms of Yest, distill'd Vinegar, and Sulphur of Antimony. If the Kibes are ulcerated, we apply a Liniment express'd from a Rape, excavated and fill'd with the

Oil

Oil of St. *John*'s-wort, and ſo roaſted; or ſprinkle 'em with the Pouder of Man's Dung, and then anoint them with an Ointment of freſh Juniper-berries and boil'd Butter; or of the Mucilage of Quinces, extracted with Nightſhade-water, and mix'd with prepar'd Tutty.

3. The Tumours next in order are ſuch as proceed from the Diſorders of the Lymph. Such are the ſerous, watry, ſoft, painleſs Swellings, that receive no impreſſion by the preſſure of one's Finger, and if look'd upon ſideways, ſeem to be pellucid. They proceed from the Obſtruction of the Lymph, and are cur'd internally by adminiſtring Diuretics, and the Decoctions of ſudorific Woods; externally by applying Lime-water impregnated with Spirit of Wine, and Cataplaſms of Cow's Dung, Cumin-ſeeds and Lye; or the Plaiſter of Bay-berries mix'd with Goats Dung and Hony.

If the Lymph be viſcid, it occaſions a ſoft, white, painleſs Swelling that retains Pits after the preſſure of one's Finger, and is call'd an *Oedema*, which generally accompanies Chronical Diſtempers: For the internal Cure we preſcribe ſtomachical and aromatic Medicines, and whatever corrects the Crudities of the Chyle, theſe being juſtly accounted the Cauſes of a viſcid Lymph. Externally we apply Diſcuſſives, for 'tis in vain to attempt Suppuration. As,

Take of the Leaves of Tamarisk, Roſemary and Rue, of each a handful: boil them in Wine till they become ſoft; then add of the Meal of Vetches and Bran, of each three ounces; Cow's Dung four ounces; Duck's Fat an ounce and a half; Honey four ounces. Make a Cataplaſm. If *Oedema*'s happen in the declenſions of Feavers, Cataplaſms of the Herb *Robert* or of Celandin bruis'd with Wormwood are very proper. Some fumigate the Parts with Amber and Vinegar upon red hot Stones, and apply the Plaiſter of Bay-berries mix'd with diſtill'd Oil of Amber, renewing it twice a day. Roſemary-leaves and Juniper-berries boil'd in Lye for a waſh for the Feet, or Bay-berries boil'd in Lime-water and the Lee of Vine-twigs to be apply'd with a Spunge, are much approv'd. If the Swelling be hard, a Cataplaſm of Goats Dung and Mans Urine is very proper.

If the viſcid Lymph be fix'd by an Acid, and ſtagnat in glandulous parts, it creats ſcrophulous Swellings call'd the King's Evil, ſome of which are hard, ſome ſoft; ſome loos and moveable, others immoveable; ſome painleſs, and others vey painful and ſhooting, as being near akin to Cancers. Theſe Tumours we endeavour to diſcuſs by applying Cata

Cataplasms of the Leaves and Roots of wild Cucumbers with Goats-dung, and the Plaister *de Ranis* with Mercury; or Gum Caran mixt with Mercury and Turpentin; and anointing with *Helmont*'s distill'd Oil. In their Infancy the Fat of Vipers is also very proper. If they cannot be discuss'd, we must endeavour to bring 'em to maturity by applying the Plaister of Melilot mixt with the Oil of sweet Almonds and Fat of Snakes; or *Platerus*'s Plaister of Tobacco, or *Sala*'s Magnetic Plaister mixt with *Diasulphuris*. When they are ripe, we ought not to open 'em, but leave 'em to their natural leisure, that so the better part of the Glandule may be dissolv'd into *Pus*. After they're broke, we apply the common Digestives mixt with precipitat Mercury well wash'd. If the Swellings are loose and pendulous, we tie 'em with a Horse-hair, and so by degrees force their separation. If they're inclos'd in proper Tunicles, 'twill be needful to extirpate the whole Membrane by the Hand of a Surgeon.

The internal Cure of the King's Evil is compass'd by purging with sweet Mercury, and black Hellebor, and administring the Decoction of Swallow-wort, Pile-wort, Drop-wort and Broom, or the following absorbent Pouder. Take of burnt Sea-sponge, three ounces; Bone of the Cuttle-fish, Jaw-bone of a Pike, prepar'd Crabs-eyes, long Pepper, white Ginger, Roots of Pellitory of *Spain*, Galls, and calcin'd Egg-shells, of each an ounce. Make a Pouder. Dose, half a dram to be given with a convenient quantity of *Arcanum Duplicatum*. The Pouder of Lizards with Hony in the Form of an Electuary is also of excellent use.

Next to the King's Evil are Schirrhus's, which are hard, immoveable Tumors in soft fleshy Parts, both internal and external. They proceed from the coagulation of Blood, as when they follow Inflammations, or from the stagnation of crude Chyle, either in company with the Blood or in any other Vehicle. For the most part these Tumors are free of Pain: If they happen to be very painful and livid, they are of a spurious Race, and apt to degenerat into Cancers. For Cure, we endeavour to discuss a Schirrus by applying Cow's Dung boil'd in Vinegar, or the stinking Oil of Tartar and that of Earth-worms mixt with Spirit of Wine; or Cataplasms of Briony-roots, Goats-dung, Lye and Soap. If these be insufficient, we must have recourse to the Gums, especially Gum Ammoniac and the Plaister of Hemlock with Mercury, or a Plate of Lead applied to the Part. If the Tumor cannot be discuss'd, we must bring it to a Head with ripening Ingre-

dients; but withal take care, that they be not too violent, leſt it degenerat into a Cancer.

A Cancer for the moſt part is the Conſequent of ſchirrous and ſcrophulous Tumors, and frequently invades the Breaſts and glandulous Places. If it come by it ſelf, it appears firſt as a Tumor no bigger than a Bean, and by degrees increaſes, becomes hard, black, livid, and moleſted with ſhooting Pains. Afterwards it feſters, ſtinks, and corrodes the adjacent Parts, being ſurrounded with Veins ſwoln with black Blood. The immediat Cauſe is a volatil corroſive Acid, which if it be not ſupplied with freſh Recruits may lie hid in the Part a long time before it feſter, and then we call it an occult Cancer. But as ſoon as it becomes an Ulcer, 'tis juſtly intitl'd a manifeſt one. If a Cancer proceed from internal Cauſes: If the whole Maſs of Blood, and the Bowels are tainted: If the Tumor lie very deep or near to large Veſſels: If the Pain be violent, and frequent Bleedings enſue; 'tis a dangerous caſe. If a Cancer be occult, it ought not to be tamper'd with, nor is it ſafe to apply any thing unleſs it be ſome very temperat Alcalies; ſuch as the Juice of Nightſhade beaten in a leaden Mortar, the Juice of the Prick-thiſtle call'd *Onopbordon*, the Pulp of rotten Apples, or Quick-lime Water prepar'd with the Water of rotten Apples, the Juice of River-crabs and Mans-dung. Sugar of Lead, and all Preparations from Lead are of excellent uſe; eſpecially a Plate of Lead cover'd with Quick-ſilver. Ointments and Cerecloths of burnt Lead, mixt with the Oil of Roſes, Oil of Frogs, *&c.* are alſo recommended; but all oily things ought to be cautiouſly us'd. In the mean while, 'twill be proper to exhibit internally abſorbent Anti-acid Powders follow'd by Purges of black Hellebor and ſweet Mercury. After which, the Sugar of Lead, the Tincture of Antimony tartaris'd, the volatil Spirit of Tartar, the Decoction of River-crabs in Milk; and above all, the Pouder of Wood-lice mixt with Crabs-eyes; are us'd with not ableſucceſs: Sometimes Iſſues are uſeful. As for manifeſt Cancers, we ſhall have occaſion to take notice of 'em afterwards under the Head of *Ulcers*.

The Acidity of the Lymph ſtands alſo charg'd, as being the cauſe of the Gummy Tumors that grow upon the Bones in the French-Pox: For 'tis the vicious Acid that pervert the natural Nouriſhment of the Bones, and occaſions its degeneracy into a preternatural Swelling. They are cur'd internally by the ſudorific Decoctions, or by a Salivation with Mercury interlac'd with Preparations of Steel and Vipers

Exter-

Externally we apply the dissolving Gums, with the distill'd Oil of Guajacum and Mercury, or a Plate of Lead cover'd with Quick-silver, or Quick-silver congeal'd by the Fumes of Lead. For mitigating the pain we may add Opium to all such Compositions.

The occasional Depravation of the nourishment of the several parts of the Body will also cause several sorts of Tumours. As, upon Bones a *Callus*; upon tendonous places a *Ganglion*, and upon fleshy parts fleshy *Excrescences*. The first two are discus'd by applying a Plate of Lead with Mercury, or the stinking Oil of Tartar with Castle-Soap, or the Spirit of Wine with the Juice of Rue; or, in obstinat Cases, the Plaister *de Ranis* with Mercury. Fleshy Excrescences, unless they adhere to the Nerves or Arteries, ought to be cut off, and the Root eaten away by the Butter of Antimony and *Unguentum Ægyptiacum*.

Some Excrescences are inclosed within their own proper Membrans, and contain peculiar Humors, resembling sometimes Hony, sometimes Pap, and in other Cases Soap or Fat. The Cause of such Excrescences is the distortion and enlargement of the Fibres, occasioning a large accession of Juice which distends and adds to the Growth of the misplac'd Fibres, till by shooting out new Tendrels, they join one another in the Form of a Concave Membrane, containing the stagnating Juice variously alter'd according to the different occasions. They frequently happen about the Head and Neck, and share the common Fate of some nervous Swellings, in being liable to alterations from the Moon. For Cure; if they are recent, we may attempt to disuss them with Gum Ammoniac; Balsam of Peru, Sulphur, &c. If they cannot be discus'd, we ply them with sharp suppurating Ingredients; such as Gum-ammoniac, Pellitory of *Spain*, Euphorbium, and Oil of Amber. When the Tumors are thus ripen'd, we open them with a Launcet, and apply a Caustic of the Ointment *Ægyptiacum*, the dulcify'd Earth of Vitriol and Salt, for extirpating the Membranes: but if the Excrescence be hard and stubborn, 'twill be needful to set aside all discussing or suppurating Ingredients, and cut up the Skin cross-ways so as not to touch the Membrane; then separat the one from the other, and cut out the Membran with the inclosed Tumour by the Root: and after all, stop the bleeding and cleanse the Ulcer, as in other cases.

Sometimes when the nervous Fibres in the Skin are tore or corroded, they throw out their nutritious Juice which set-

tles into *Warts*; and in the Toes of the Feet, where the nutritious Juice of the Bones is ſqueez'd out, into hard Corns. Some of theſe Warts and Corns are fix'd ſo deep into the Tendons, that they cannot be extirpated without incurring the danger of Inflammations, Convulſions or Gangrenes. But others are only ſuperficial and eaſily removed. Warts are extirpated by applying the Juice of Celandine, or the Aſhes of Briony mix'd with its Juice, or the Juice of Spurge, ſcarifying the part gently before Application. Some commend an Ointment of Hony with the Spirit of Sulphur, and the Solution of Sal-armoniac in Water, or the Juice that Snails caſt forth when rub'd with Salt; but the beſt method of rooting them out, is to touch them with Butter of Antimony or *Aqua fortis*, or rather to burn them out with a hot Iron. If they are pendulous and hang by a ſmall Root, a thread of Silk ty'd about the Root will cut off their nouriſhment, and make them fall off. As for the venereal Warts that generally invade the Genitals, we apply the Solution of ſublimat Mercury and Allum in Plantain-water.

As for *Corns*, we order the Feet to be waſh'd, and the thick Skin to be ſcrap'd off; then we apply Galbanum or Gum-ammoniac, or the Plaiſter of Hemlock with Mercury, ſoften'd in the Oil of Bricks. Some recommend pieces of raw Beef, or Onions mix'd with Soap in the form of a Cataplaſm. If theſe prove ſucceſsleſs, we have recourſe to *Aqua fortis*, or Butter of Antimony mix'd with Hony, taking care to defend the neighbouring Parts, and take off the *Eſchara* with the Plaiſter *Diachylon* with Gums. But if the Corns lie deep, and be fix'd in the Tendons, 'tis dangerous to apply Cauſtics, or to cut them with a Knife; tho' in other Caſes, ſuch Operations may ſucceed.

Sometimes we meet with ſpungy Swellings about the Joints, that proceed from the nutritious Juice of the Membrans mix'd with the glutinous Matter that bedews the Joints. The beſt way of curing them (if ſo be they admit of a Cure) is to throw aſtringent Pouders upon them; ſuch as the Sugar of Lead, Vitriol, Calaminar Stone, and ſometimes precipitat Mercury. Stronger Cauſtics, or Emollient Ointments or manual Section, are for the moſt part very dangerous, by reaſon of their tendency to Cancers.

4. The fourth *Claſs* was allotted for the Tumors of the Blood-Veſſels, which are of two ſorts; 1. Thoſe of the Arteries call'd *Aneuriſma's*. 2. Thoſe of Veins call'd *Varix*. The former are occaſion'd by cutting the Artery in Blood-letting

letting; or relaxating its Coats by violent Motion, Crying, &c. or by the corrosion of some internal Cause; all which are apt to occasion a Collection of Blood about the injur'd part of the Artery, and consequently a Tumor. The Signs are a Swelling rising gradually according to the pulsation of the Artery; if the Artery lie near the Skin, its Colour is reddish; when the Swelling is press'd by one's Finger, it sinks and disappears, without it be inveterate. 'Tis cur'd by opening a Vein in the opposite part of the Body, avoiding all oily fat things, and applying Bole Armenic, Frankincense, Earth of Vitriol, Dragon's Blood, and *Laudanum Opiatum*, with a Plate of Lead and a strong Ligature. In *France* they follow a new Method; As for example, in the Arm, they squeeze the superiour part of the Artery so close, that no Pulse is perceiv'd; then they open the Tumor with a Launce, and remove the congeal'd Blood. Having discover'd the Wound of the Artery, they apply to it a little Ball of Vitriol wrapp'd up in Cotton, and the Pouders of Sarcocol, Frankincense, and Pine-tree Rosin with Tow; and above all Bolsters cover'd with the common Digestive, and ty'd down with a strong Ligature. The upper Bolsters are renew'd every Day; but the Ball of Vitriol which is no bigger than a Pea, and which is insensibly dissolv'd by the Blood that soaks thro' the Cotton, is suffer'd to continue till it fall off.

The immediate cause of a *Varix* is the relaxation and distention of the softer Fibres of the Veins. The remote causes are the thickness of the Blood, or the compression of corresponding Veins; as when the Iliac Vessels being straiten'd by big Bellies, occasion a *Varix* in the Veins of the Legs. The Diagnostics are the Turgidity, and blewish Blackness of the Veins. It seldom requires a cure unless it be painful or threaten a Rupture, Ulcer or Gangrene. If it be very painful, we apply the Ointment *Populeum*, with Mucilages of Flea-wort and Fenugreec-seeds, the Oil of Chamomil and Flower of Beans. If it be ulcerated, apply the Plaister of Frogs-spawn with Hartshorn, Frankincense and sweet Mercury. If the Tumor be very high, and apt to break, open it with a golden or silver Needle, and apply a Plate of Lead, or foment with a Spunge soak'd in the Decoction of Allum, Salt, and the Fruit of *Acacia* in Vinegar; or apply a Cataplasm of the Flower of *Lupins*, dry'd Goats-dung, and Vinegar in which a hot Iron has been five times extinguish'd; remembring still, to tie a strong Ligature about the Part. If the *Varix* is open and bleeds ex-

ceſſively, apply the Pouder of Hogs-dung, or Clouts dipp'd in the Solution of Steel and Allum. In the mean while we ought to take care that the Ligatures do not hinder the circulation of the Blood, and exhibit inwardly attenuating ſudorific Decoctions.

CHAP. II.

Of Wounds.

THe nouriſhment of wounded Parts, and the Blood which flows from 'em, being corrupted by the external Air, become acid, corrode the nervous Fibres, extinguiſh the innate Spirit, and produce all the tragical Conſequents of Wounds.

The Wounds of internal Parts are diſcover'd by the lame performance of their reſpective Offices, or by the alteration of Excrements voided by 'em. Wounds of ſanguine Parts ought to be carefully diſtinguiſh'd from thoſe of the Nerves or Membranes; as alſo the Curable from the Incurable; ſome of which are mortal, ſome not. The mortal are ſaid to be ſuch, either when an internal Bowel eſſential to Life is diſabled; or when the Blood, Spirits, or Vital Juices are too copiouſly evacuated, or thrown upon ſome Cavity from which they cannot be retriev'd.

Thus the Wounds of the Heart are not always mortal without they reach into the Cavities, eſpecially the left; but thoſe of the Lungs, *Bronchia* and Wind-pipe; of the Midriff, eſpecially its tendonous part; of the internal ſide of the Gullet and Orifices of the Stomac; of the Guts (excepting that part of the ſtreight Gut which may be reach'd from without;) of the Caul, Sweetbread, and Liver, (eſpecially if they reach the large Veſſels;) of the Gall, Bladder and Branches of the choleric Paſſage; of the Spleen, which is full of arterious Blood; of the Conduit of the Breaſt, the Navel-ſtring, Kidneys, and the Neck of the Bladder; of the Womb while the Woman is with Child; of the *Medulla* of the Brain, intercoſtal Nerve, *Cerebellum*, and Marrow of the Back bone, betwixt the *Vertebræ* of the Neck, and thoſe of the Back: theſe, I ſay, are all mortal. Thoſe of the Meſentery are curable if the large Veſſels be ſafe: as likewiſe thoſe of the cortical part of the Brain, of the temporal Muſcles, of the bottom and muſcular part of the Bladder, and the inferior part of the ſpinal Marrow, if it be not cut acroſs.

A Surgeon's Duty with reference to Wounds is to remove the corrupt Blood and Juice that hinders coalition, to join the divided Parts, and apply such vulnerary balmy Ingredients, as preserve their nutritious Juice from corruption. Now, for so much as the natural Temperature of the nutritious Juice consists in a temperate oily volatil Salt, surrounded with a dewy Vehicle, and consequently its degeneracy is justly call'd *Acidity*; we ought therefore to keep the Wound safe from the Injury of the Air, which has a notable Virtue of creating Acids, and to untye or open it as seldom as ever we can. Some Surgeons being more amus'd with the Effect than the Cause, choose rather to provide for the removal of the Gore and Filth, than to be so nice in exposing the Wound to the Air. But as their Practice is unaccountable, so it ought not to be look'd upon as a Precedent. The Surgeon's Breath, especially that of drunken Persons or Women in their Terms, is likewise prejudicial to a Wound; and therefore ought to be avoided as well as the influence of the Moon, which stupifies and benums whatever is expos'd to it, as appears by gathering its Rays with a Convex Glass.

Thus the corruption of the natural Juice is prevented by applying temperate, volatil, balmy, saline Medicines, such as the Balsam of *Peru*, Turpentin, Oil of St. *John*'s-wort, Balsam of Sulphur, and especially *Paracelsus*'s Balsam of Samech prepar'd from the Salt of Tartar volatiliz'd by the Spirit of Wine. The common express'd Oils, without they be further prepar'd, are pernicious, by reason of their latent Acid; as also all sharp volatil Salts, because they increase the Pain, melt down and consume the Nourishment of the Part, and hinder consolidation. But above all, let *Acids* be strictly prohibited. In the mean while we administer internally Medicines prepar'd from the vulnerary Plants, Dogs-dung, Earth-worms, burnt River-crabs, and the Blood of Goats. Crabs-eyes mix'd with Wine are also of good use; for they qualifie and correct the Acid of the Wine, which of it self is highly pernicious. Nay, the chief Virtue of all vulnerary Ingredients is that of subduing an Acid; thus Mercury fix'd by Acids is reviv'd by boiling in the Juices of vulnerary Plants.

Some are wont to apply digestive suppurating Ingredients to all Wounds; but if the Wound be free of contusion, and no heterogeneous substance be lodg'd in it, they are noxious, for that they cause a needless Afflux of Matter, and so convert the Wound into an Ulcer. 'Tis true that Wounds

receiv'd by a Piſtol, which generally carry contuſion along with them, or thoſe of the Head which require to be kept open for ſome time, or ſuch as are already ulcerated, require Digeſtives. Such are Turpentin, the Yolk of an Egg, Myrrh, Balſam of *Peru*, Oil of Roſes, Camphyr, Hony, and, in a word, all oily Alkalies, to which we add abſorbent Pouders, as Chalk, Lead, Copper, *&c.* After Digeſtion we add ſome ſharper Ingredients for cleanſing the Ulcer.

The remaining part of a Surgeon's Office is to take out the heterogeneous Subſtance, if any ſuch there be; and to join the divided Parts either by convenient Ligatures, or ſewing 'em together. The heterogeneous Subſtance is extracted by proper Inſtruments, or by applying the Fat of Hares with Amber and living Cray-fiſh, or the dry'd Tongue of a Fox ſoak'd in Wine; or a Plaiſter of Hony, Yeſt, and Miſſetoe of the Oak: and adminiſtring in the mean while the vulnerary Decoctions, ſuch as that of Dittany with Crabs-eyes. For joining the ſides of the Wound, we uſe a Fillet of two Ends meeting in one Body, which joint Body we apply to the Part oppoſite to the Wound, and bring the two Ends acroſs upon it, ſo as to join its Lips. Theſe Fillets will ſerve for joining ſimple Wounds that run along with the length of the Fibres; but for large ones that come acroſs the Fibres, or the Joints, or when any Part is almoſt cut off to a very Point, then 'twill be needful to ſew up the Part with a Needle and Thread. However we ought to take care not to attempt ſewing up a nervous Part, for fear of inlarging the Pain or pricking a Nerve; as alſo when we ſew, not to bring the ſides of the Wound too cloſe, becauſe they are apt to ſwell; and beſides, the purulent Matter, if it have not a ſufficient vent left, will recoil, and create hidden Ulcers, or corrode the Bones.

Wounds that come by Pricks rather than Cuts are plied with Tents, which provide for the Incarnation of the remote bottom of the Wound, before its ſurface be cover'd with Fleſh. But in applying Tents we ought to obſerve theſe Cautions; 1. They muſt not be too long apply'd, becauſe they retard conſolidation. 2. In nervous Parts they ought not to be long or hard for fear of irritation. 3. They ought not to be too large, for fear of rubbing off the Gore which cements the ſides of the Wound, or hurting the growing tender Fleſh, and denying reception to the purulent Matter. When the Wound is a cloſing we ought not to be too liberal in applying aſtringent Pouders, becauſe they

ſtraiten

straiten the Pores; harden the Fibres, and so occasion a Scar or Roughness, especially in adult Persons, whose nutritious cementing Juice is not so balmy as that of young People. To prevent such Deformities, let the Fat of a Graylin be frequently dropp'd into the Wound when it begins to consolidate. 'Tis true, that moderat Astringents are useful for drying up the thin serous Humor that accompanies the nutritious Juice of the Part, cramps its cementing Faculty, and renders the Part flaccid, soft, and overgrown with luxuriant Flesh. But in simple Wounds, where there is no loss of Substance, they are not so very necessary.

To conclude, we may justly infer from the foregoing Premises, that vulnerary Medicines are enrich'd with a temperat volatil oily Salt, and a gentle astringent Force; as being such as do not of themselves create new Flesh, but only preserve the natural State of the nutritious balmy Juice, which alone is able to consolidate and repair the loss. They are prescrib'd in these or the like Forms. First, Internally,

Take of River-crabs, in number twelve; Comfry-roots, an ounce; Leaves of Bugloss and Ground-ivy, and Tops of St. *John*'s-wort, of each a handful: Boil them in Water and Wine, and sweeten the strain'd Decoction with the Syrup of Ground-ivy; and if a nervous Part be wounded, add Oil of Amber. Dose, six ounces twice a Day. Note, 1. The simple vulnerary Medicines are best. Therefore Crabs-eyes and Diaphoretic Antimony; in Fevers Antimonial Nitre, and in nervous Wounds the Oil or Spirit of Amber; are sufficient for internal use. Note, 2. When any heterogeneous Matter is lodg'd within the Wound, or when 'tis very foul, we add to such Decoctions, Savin, Mugwort, Speedwel, Agrimony, &c. and when the Wound is sufficiently cleans'd, leave 'em out.

Secondly, Vulnerary Medicines are prescrib'd for Injections: As, Take of the Herbs, Speedwel, Winter green, Sanicle, and Tobacco-leaves, of each two handfuls; Dog's Dung, four ounces. Boil them in Water. Add to the strain'd Liquor Spirit of Wine with Hony, and wash the Wound with the Mixture.

Thirdly, They are prescrib'd in the Forms of Oils or Balsams to be dropp'd into the Wound; of which the Oil of St. *John*'s-wort, Balsam of Sulphur, or that of *Peru*, and especially *Capaivi*, are infinitely the best.

Fourthly, Ointments: As, Take of Benzoin, an ounce; Spirit of Wine, an ounce and a half; Mastic, a dram; of the black Balsam, half an ounce. Make a Liniment. Or,

Take

Take of Ear-wax, two drams; Sugar of Lead, two drams; With the expreſs'd Oil of Walnuts make an Ointment. Note, 1. Ear-wax is of peculiar uſe for Wounds of nervous Parts. 2. Spirit of Wine not over-rectify'd is of admirable efficacy for preventing Corruption and Conſolidating. Hence *Venice* Triacle mix'd with it and appplied to the Wound is much approv'd.

Fifthly, Plaiſters; of which *Paracelſus*'s Oppodeldoch, and *Crollius*'s Styptic Plaiſter are the beſt.

Some pretend to cure Wounds by Sympathy; as by mixing the Blood of the Wound with the Vitriol of Copper calcin'd by the Sun; or by applying Arſmart to the Wound, it being firſt dipp'd in cold Water, and then removing it from the Wound while 'tis hot, and burying it in a Dunghil. But the Colcothar of Vitriol waſh'd, and diſſolv'd, infus'd or boil'd in Wine for waſhing the Wound, is certainly an uſeful Medicine.

The general Cure of Wounds being thus premis'd, we come next to conſider ſome particular ſorts; as, 1. Bruiſes or thoſe which partake of Contuſion. If the Contuſion be very conſiderable, 'twill be needful to ſcarifie the Wound; if not, the common Digeſtives and ſuppurating Medicines will ſufficiently cleanſe it; to which we may add the Oil of Wax, expreſs'd Oil of St. *John*'s-wort, and the Plaiſter of Cummin. Towards the end of the Cure, we may apply the Spirit of Sal Armoniac, diſtill'd with Quick-lime. —— Of this Nature are the Wounds receiv'd from Guns; for ſo much as Bullets tear and bruiſe wherever they come; in curing them we ought firſt to promote Suppuration, by applying Tents dipp'd in Spirit of Wine, and cover'd with the following Liniment.

Take of the Oil of White Lillies, four Pound; boil two Puppies in it till their Bones be diſſolv'd; then add of Earth-worms boil'd in Wine, a pound. Boil them together, and when the Liquor is ſtrain'd, add *Venice* Turpentin, three ounces; Spirit of Wine, an ounce and a half. Make a Liniment. After Suppuration is obtain'd, let the Wound be cleans'd with the following Ointment.

Take of *Venice* Turpentin, five ounces; Oil of Roſes, an ounce; Hony of Roſes ſtrain'd, three ounces; Myrrh, Aloes, Maſtic, and round-rooted Birth-wort, of each half a dram; Flower of Barley, three or four drams. Make an Ointment to be ſprinkled with Spirit of Wine. If the Pus be much corrupted, we may add precipitat Mercury. If the

Bon

Bones be seiz'd with Aches after they're cur'd (as it sometimes happens in these Wounds) anoint them with the Oil of Turpentin. If when the Wound was receiv'd, the Gun was very near the Person, the wounded part will be likewise burnt; in which case Quick-lime-water with the Juice of River-crabs and Phlegm of Allum is very useful.

2. Maliguant and venomous Wounds. The Causes are a poisoned Instrument, or the biting of an angry or mad Animal. The Symptoms are an unaccountable Pain, sudden blewness or blackness of the Part, and its tendency to a Gangrene; difficulty of Breathing, cold Sweats, Swoonings, Headaches, &c. If the Wound be deep, it must be scarify'd, and *Venice* Triacle with Spirit of Wine applied to it. If it was caus'd by the biting of a Viper, apply a living Toad bruis'd, or the Pouder of a dry'd Toad with Vinegar, and touch the part with a hot Iron, but so as not to burn it, and exhibit Urine to drink. For the Bites of mad Dogs, &c. apply the Stone of an Indian Serpent, or in want of that, *Salt*'s Magnetic Plaister mix'd with the Pouder of River-Crabs; or a Cataplasm of Onyons, Garlic, *Venice* Triacle, and Yest. After the Poison is extracted, we apply Digestives as above. Wounds receiv'd by poisoned Darts, &c. are cur'd after the same manner. In the mean while we administer internally *Venice* Triacle, Diaphoretic Antimony, &c. with distill'd Vinegar.

3. Wounds of Veins and Arteries. In which the most pressing Indication is to stop the Bleeding: For this end we apply styptic Liquors of the Solution of the Vitriol of Steel mix'd with a half quantity of the Solution of Allum in some astringent Vehicle; or a mixture of strong Vinegar, Crocus of Steel, and the dulcify'd *Caput Mortuum* of Vitriol; or, above all, the Moss of a dead Man's Skull, or the Mushroom call'd *Crepitus Lupi*, tied very hard to the part. If the bleeding be obstinat, and if there be no Nerves, or Tendons in the way, we apply a Caustic of Vitriol calcin'd till it become white, mix'd with *Crepitus Lupi*. For Amputations, Ligatures are of very good use. Internally we exhibit nitrous Acids with astringent Tinctures. But in the mean while the Patient must carefully avoid all Emotions either of Body or Mind.

4. Wounds of the Nerves, or nervous Parts, are very dangerous, by reason of their liableness to Convulsions, Inflammations, Gangrenes, &c. If a Nerve or Tendon be prick'd, drop into it the distill'd Oil of Turpentin mix'd with

with Spirit of Wine, and Camphyr or Euphorbium. If a Nerve or Tendon be cut acroſs, avoid all Tents, and expreſs'd Oils, or fat Ingredients; and apply volatil vulnerary Balſams ſharpen'd with the diſtill'd Oil of Amber, or the Pouder of Earthworms mix'd with Turpentin, or the Pouder of Snake's Caſt-coats mix'd with that of Crab's-eyes; or a Mixture of the Oil of Earthworms, Oil of Foxes, Man's Fat and Juice of Earthworms; rubbing the whole Interval, betwixt the wounded part and the Original of the Nerve. Sometimes when Tendons are cut acroſs, they may be ſew'd together with a fine Needle, according to the Example of a late Inſtance of that Nature in *Paris*.

5. The Wounnds of the Breaſt. In curing of which we ought to mind theſe Cautions: 1. That if the Wound be lower than the ſeventh Rib, it belongs to the Belly, and not to the Breaſt. 2. 'Twill be needful to uſe Tents for the Wounds of the Breaſt; but they ought not to be put in during the time of Inſpiration, leſt they be ſuck'd in: and beſides, they ought to have large Heads to prevent their Ingreſs. 3. Internally, Diuretics are very proper, by reaſon that matter in the Breaſt has oftentimes a tendency to paſs by Urine. 4. Antipleuritical Medicines will be alſo very convenient for preventing the Evils that may inſue.

6. Wounds of the Head: In all which the Belly ought to be kept open. If they're only ſuperficial, let a Plaiſter of Tacamahac, and the Plaiſter of Betony be apply'd. If the Scull be injur'd, apply the Pouders of the *Flower-de-luce*, Aloes and Myrrh, mix'd with Spirit of Wine, or diſtill'd Oil of Turpentin. If the Meninges and Scull be cut quite through, we muſt ſtop the internal Bleeding by the Pouders of Aloes, Frankincenſe, and Bole Armenic, mix'd with the Whites of Eggs, and put into the Wound Clouts impregnated with the Oil of Turpentin or Balſam *Capaivi*. Some apply the Oil of Roſes, but that and all fat viſcid Ingredients are abſolutely pernicious. As for Bruiſes of the Head; if they are without Wounds, and are not likely to be diſcuſs'd, we muſt promote their Suppuration, and open them very quickly, leſt the ſtagnating matter ſhould injure the Scull. If they are accompany'd by Wounds, but ſuch as do not injure the *Cranium*, we apply a Digeſtive of Turpentine, Gum *Elemi*, Fat of Beavers, and that of Hogs. If the Scull be hurt by Bruiſes, they cauſe either a Fracture, or a Fiſſure, or Depreſſion of the Bone; of which more anon.

We

We shall conclude this Chapter of Wounds, with a few of their most remarkable Symptoms. 1. Inflammations of Wounds are cur'd by applying Lime-water or the Juice of River-crabs with Camphyr and Sugar of Lead. 2. An *Erysipelas*, by applying *Venice* Triacle and Salt of Wormwood dissolv'd in Spirit of Wine. 3. Luxuriant over-growing Flesh caus'd by the spungyness and flagginess of the Part is remov'd by applying burnt Allum, *Crocus Metallorum*, the Ointment *Ægyptiacum*, *Platerus*'s Green Water, or rather the Pouder of the Crystals of Silver dissolv'd in Spirit of Nitre. 4. The Pain which generally attends Wounds of nervous Parts is mitigated by applying a Mixture of the Oil of Earthworms, distill'd Oil of Lavender, and that of Amber. 5. A *Synovia* or Efflux of the nutritious Juice of the wounded Joints, is cur'd by applying Clouts soak'd in the Water distill'd from River-crabs, or in a Virgin's first Menstrual Blood; or by applying a Cataplasm of Hogs-dung boil'd with the Blood of the Wound; or the Moss of a dead Man's Skull, or *Wurtius*'s brown Ointment; or in the room of 'em all, the following Pouder, *viz.* Take of the Pouder of Oyster-shells, an ounce; Calaminar-stone, Cuttle-bones, and Jaw-bones of Pikes, of each two drams; prepar'd *Spodium*, and seal'd Earth or Allum, of each a dram and a half. Mix and make a Pouder. 6. Convulsions of wounded Parts are cur'd internally as an Epilepsie; and externally by applying the Balsam of *Peru* with the distill'd Oil of Amber, and if a Nerve be prick'd, treating it as above; or if it be imperfectly cut, by cutting it or the Tendon quite thro', and so saving the Person's Life, tho' at the expence of the Sense of that Part. 7. The Fevers that attend Wounds are for the most part usher'd in by extraordinary Heat, Redness of the Eyes, unwonted Pain, and frequent Flushing; they're cur'd by Sudorifics, such as Crabs-eyes, Diaphoretic Antimony, Coral, and Sal Armoniac, mix'd with Nitre and the Juice of Citrons.

CHAP. III.

Of Ulcers.

ULcers are the Corrosion of the Fibres, occasion'd by a sharp acid Ferment flowing from the corrupted Nourishment of the Part, or the vicious Blood and Lymph. The Acidity of this corrosive Ferment is sufficiently made out by the acid Smell of Plaisters, after they've been applied

plied to Ulcers, and the unfitneſs of all Alcalin Cauſtics to corrode, as being more apt to mortifie. In nervous Parts, whoſe nutritious Juice is not laden with ſuch a ſtrong volatil Salt, as that of the ſanguine; and in glandulous places, where the Lymph does naturally incline to Acidity, Ulcers are more troubleſom and dangerous than elſewhere. In Perſons whoſe Blood is degenerat from its volatil State, and become acid, Ulcers are very obſtinat, and ſcarce curable, without the *Craſis* of the Blood be retriev'd. If an Ulcer be clos'd before the malignant Ferment be quite drain'd, 'twill either relapſe in the ſame place, or corrupt the adjacent Bones, or diſplay its Energy in another part of the Body. If they be much expoſed to the Air, their Lips become hard and callous, and ſometimes dry: If they're much diſcolour'd, they ſignifie a Gangrene: If they continue long, they cauſe Conſumptions, Fevers, and Ulcers of the Lungs. If the Matter that iſſues from 'em be bloody, thin, ſharp, yellow, or ſtinking, it is not ſo favourable as when 'tis white and thick. When Ulcers become dry, unaccountably, and of a ſudden, they threaten imminent Death.

Ulcers are cur'd by volatil Alkalies and fix'd Abſorbents, which mortifie the prevailing Acid. The external Remedies are of three ſorts. 1. Digeſting. 2. Cleanſing; and, 3. Healing. Thoſe of a digeſting Force are the more temperat Alkalies: ſuch as Turpentin, Yelks of Eggs, Maſtic, Oil of St. *John*'s-wort, Myrrh, *&c.* and are us'd for qualifying the ſharp bloody Matter, and working it into a thick Conſiſtence call'd *Pus*. For the prevailing Acid converts the nutritious Juice of the Part into a ſharp thin Matter, which ought to be qualify'd by an Alkali, in order to become thick; but ſo as not to deſtroy all the force of the Acid, which entitles it to a whitiſh Colour. When the Matter is thus prepar'd, we proceed to cleanſing Remedies, that is, ſharper Alkalies that deſtroy the Acid more powerfully, and hinder the Converſion of the nutritious Juice into corrupt Matter. Their cleanſing Virtue is only accidental, and leſs to be regarded than that which directly ſtifles the Cauſes. Of this Nature are the Decoctions of vulnerary Plants in Lime-water, or Cataplaſms of the bruis'd Leaves of vulnerary Plants, which are infinitely more uſeful than all the Oils, Ointments, and Plaiſters of the Shops; the laſt being of no uſe but for defending the Wound from Air and Cold.

Take

Take of Tobacco-leaves, two handfuls; Wormwood-tops and the Herb Speedwell, of each a handful; Roots of round-rooted Birthwort, an ounce; Juniper-berries, half an ounce; Crude Allum, from three to six drams. Boil them in Blacksmiths-water, strain the Liquor to be injected into the Ulcer, adding at every Injection a convenient quantity of the Spirit of Wine.

Take of Lime-water, a pound; Sweet Mercury, two drams; Spirit of *Venice* Triacle camphoris'd, an ounce. Mix, *&c.*

Take of the Crocus of Steel, prepar'd by Precipitation, two or three drams; Calaminar-stone or seal'd Earth, a dram; *Lac Lunæ*, a dram and a half; Mace, Myrrh, Olibanum and Aloes, of each a dram; Camphyr, half a dram. Make a Pouder to be sprinkled with the Spirit of Triacle camphoris'd, and applied to obstinat Ulcers. A cleansing Ointment may be prepar'd of the Juices of Tobacco, Wormwood, Betony, Hony of Roses, Aloes, Myrrh, Flowers of Sulphur and Turpentin. If the Ulcers are rotten, or the Part much corrupted, the Ointment *Ægyptiacum*, or Verdigrise with distill'd Vinegar, will be proper.

When the Wound is cleans'd, we apply healing and consolidating Remedies, which retrieve the natural balmy Juice of the Part, cement the Wound, and by a gentle astringent Force strengthen the Fibres, and prevent the unseasonable growth of luxuriant Flesh: Such are the Balsam of Sulphur, express'd Oil of Filberts, Balsam of *Peru*, &c. mix'd with the dulcify'd Earth of Vitriol for benign, and arsenic or precipitat Mercury for malignant Ulcers. But often-times oily Ingredients are improper; and therefore we shift 'em for Hony and the Juices of vulnerary Plants; and in rebellious Cases add Quick-silver, from which the Spirit of Nitre is drawn off. If the Ulcer be cover'd with luxuriant Flesh, touch it with *Crocus Metallorum*, or the Crystal of Silver dissolv'd in *Aqua-fortis*. If the Ulcer become suddenly dry, apply an Ointment of Turpentin, Hony, Juice of Smallage, and Flower of Beans or Fenugrec. In general the following Plaister is of singular use for consolidating Ulcers.

Take of Mastic, an ounce; Turpentin, three ounces; yellow Wax, four ounces. Mix, and make a Plaister according to Art. Or, Take a convenient quantity of Quick-lime wash'd twice or thrice, and dry'd: Mix it with the Oil of Linseed, and Bole Armenic, for a Plaister.

In the mean while 'twill be requisite to administer vulnera ry Decoctions and Essences inwardly, especially those of River crabs, Dogs-dung, Ground-ivy, and Tops of St. *John*'s-wort To which we add the Decoctions of Sudorific-woods, th Tincture of Antimony, the Spirit and volatil Salt of Vipers Myrrh, Saffron, chalybeat diaphoretic Antimony, and Cora or Crabs-eyes exhibited with Vinegar; and interlac'd wit Purgatives of Turbith Mineral, or Sweet Mercury with th Extract of Black Hellebor. In desperat Cases we must hav recourse to a Salivation.

Having dispatch'd the general Cure of Ulcers, we sha now descend to a few Particulars; as, 1. The Ulcers tha are attended by a *Caries* or Rottenness of the Bones, whic must be particularly accounted for before the Ulcer can b cur'd. When a *Caries* begins, the Bone appears fat, oily and yellowish; and when it is perfectly rotten, it become black, uneven, and full of little Holes. If the Bone be no expos'd to one's view, either by the naked Eye, or thro' Microscope, its Roughness and little Pits are discover'd b a Probe. If a *Caries* approach to the Joints, or be sur rounded by many nervous Parts, 'tis not easily cur'd. How ever the Method of Cure is first to dilate the Ulcer wit Tents of the Roots of Gentian, or the Heart of Elder then to apply the rectify'd Spirit of Wine, and the Poude of Euphorbium mix'd with the Root of Florentin Orri Birthwort, Aloes or Myrrh. The distill'd Oil of Guaja cum and that of Cloves are also very proper; but all Oi by Expression or Infusion are pernicious. Injections of war Plantain-water, in which Sweet Mercury is dissolv'd, are excellent use for cleansing the Bone, and fetching off its Scale But if they prove ineffectual, we must either scrape the Bo with a Knife till it appear white and solid, with the Marks little Blood-vessels; or apply an Actual Caustic, the adjace Parts being carefully defended from its Injury. After scr ping or burning, we apply the Spirit of Wine, or distill'd O of Cloves.

2. Fistula's or winding Ulcers with callous Sides: T Figure and Number of their Turnings must be carefully trac by a small Candle of Wax and Turpentin: If the bottom the Fistula be a Bone, it discovers it self to the Probe; a if it be painless, signifies that the *Periosteum* is broke: If end in a nervous Part, the exquisit Pain will lead us to t knowledge of it; if in a Blood-vessel, the obscure Colour the Matter will give us to know so much. Glandulous Plac

are most liable to 'em, and unless the Hardness can be remov'd, they prove incurable. Now in order to remove it, and to cleanse the Ulcer, we first dilate the Orifice (which in callous Ulcers is always narrow) with a Tent of Gentian-roots sprinkl'd with burnt Allum: then we inject Lime-water with Spirit of Wine; or the Juice of River-crabs with the Juice of Tobacco and Sweet Mercury; or a Mixture of the Honey of Roses, Spirit of Wine, and precipitat Mercury. In inveterat Cases, we apply the green Waters, or the following Mixture. Take of the Ointment *Ægyptiacum*, half an ounce; sublimat Mercury, a dram; Lye, four ounces; Rose-water, an ounce; Plantain-water, four ounces; Arsenic, a scruple. Boil them till the third part be consum'd, and apply the remainder with Tents. If the Pain be so violent that these Remedies cannot be applied, we must lay open the Fistula's, and consume the Callus as above. For a Fistula in the Corner of the Eye, call'd *Fistula Lachrymalis*, the following Mixture is of noted efficacy. Take of prepar'd Tutty, a dram; fine Pouder of Lead and crude Antimony, of each half a dram; Cerus and Litharge, of each a scruple. With the Cerecloth call'd *Diachalcitidos* mix, *&c.*

3. Sordid or rotten Ulcers. In the former the Matter is slimy, thick, livid or black; in the latter, it stinks horridly. Sometimes Ulcers become sordid thro' the indiscreet Application of fat Oils and viscous Ointments, in which Case Cataplasms of the Dung of Animals with Wine are very successful. In general, for all sordid Ulcers, we prescribe strong Cleansers; such as the Juice of Tobacco or Savin, Spirit of Wine, the Ointment of *Ægyptiacum*, Quick-lime-water with Sweet Mercury, or a Precipitat upon which Spirit of Wine has been frequently distill'd.

4. The inveterate Ulcers in the Legs, call'd *Phagedena*, which generally are somewhat corrosive and apt to inlarge their Dimensions. Let 'em be wash'd with distill'd Water of rotten Apples, mix'd with the Extract of Birthwort-roots, or with rectify'd Spirit of Wine, Sweet Mercury, and Sugar of Lead: or the Decoction of Tobacco in which Allum is dissolv'd; or the Solution of precipitat Mercury, or of the Dross of the *Regulus* of Antimony, in Plantain-water; or the Solution of Gun-pouder in Wine. After washing, apply the Ointment *Diapompholigos*, and Sugar of Lead, or precipitat Mercury, with Tents. And anoint the Circumference or Edges of the Ulcer with the rectify'd stinking Oil of Man's Dung.

5. Cancrous Ulcers. Their Cauſes and Symptoms are accounted for in the Chapter of *Tumors*. As for their Cure, let the Dung of a Cat fed with River-crabs; or the Pouder of a Toad and a Lizard calcin'd together in a new cloſe Veſſel; or mix'd with black Pepper, Salt, dry Soot, and Orpine; be ſprinkl'd upon the Ulcer after 'tis waſh'd with Plantane-water. If theſe prove ſucceſsleſs, apply the Oil of Mans-dung, and for the laſt Refuge Arſenic fix'd with Nitre, and mix'd with Soot and *Rulandus*'s Balſam of Sulphur in the form of an Ointment, or the Oil *per deliquium* of the Arſenic thus fix'd, it being dulcify'd with Spirit of Wine. If the Cancer ſtill continue after theſe Applications, 'twill be needful to cut it off, and then burn out its Roots with a hot Iron; for if the leaſt Particle of the Ferment be left, 'twill revive again. *Allior* Phyſician to the Duke of *Lorrain* publiſh'd a Schedule at *Paris* ſome Years ago, in which he pretended to cure an ulcerated Cancer without cutting or burning; and that by a certain Alcalin Salt that is ſo fix'd, that it won't diſſolve or melt as the other Alcalin Cauſtics, which by ſo doing exaſperate the Cancer. This Salt he ſays makes an *Eſchara*, and converts the ſharp Matter into a laudable *Pus*.

6. Ulcers caus'd by Burning. In order to adjuſt their Method of Cure, we ought to diſtinguiſh three Degrees in Burning. 1. When the outer Cuticle alone is hurt, and lifted up in little watry Bladders. This is the ordinary effect of hot Water, burning Straw, &c. 2. When the inner Skin is alſo contracted and wrinkled. This is the effect of hot Oil, Wax, Pitch, &c. 3. When the Fleſh it ſelf is burnt, and the Skin caſt into a Cruſt, as by melted Metals, &c. The Cure conſiſts in ſubduing the volatil Sulphurous Acid of the Fire which melts down the nutritious Juice of the Part, and cauſes the fiery Bladders. For this end we apply for the firſt degree Quick-lime-water prepar'd with the Decoction of Rapes, and mix'd with the Oil of Linſeed to the Conſiſtence of a thin Ointment; or a Liniment of Quick-lime, (frequently waſh'd and purg'd of its ſharp Salt) Tutty, Whites of Eggs, with Vinegar and Oil of Roſes; or the Juice of Onyons or Garlic mix'd with Salt, Caſtile-ſoap, and Oil of Roſes. The Mucilage of bruis'd River-crabs extracted with the Water of Frogs-ſpawn, or an Ointment of River-crabs bruis'd and mix'd in a Leaden Mortar with freſh Butter; the Solution of Litharge in Vinegar mix'd with the Oil of Rapes, Camphyr, Mucilage of Quince-ſeeds, and the Whites of Eggs; a Liniment of common Oil mix'd with the Whites of Eggs; or the

Syrup

Syrup of Elder mix'd with Spirit of Wine, are all approv'd in the same case.

In the second Degree we lay open the Bladder without any delay, and then apply the above-mention'd Medicines, or a Liniment express'd from Hens-dung fry'd with fresh Butter and Sage, and Plantane-leaves; or a Mixture of the Pulp of Apples boil'd in the Water of Frogs-spawn, with Sugar, Catnphyr and Saffron.

In the third Degree we lay open the Pushes with all possible speed, and apply emollient Liniments for separating the Cruft, such as Butter mix'd with the Decoction of Mallows, or the Mucilage of Quinces extracted with the Water of Frogs-spawn, and mix'd with Butter, the Oil of Eggs, and that of white Lillies. If the Cruft do not come easily off, it must be cut with a Launcet, for fear the imprison'd Matter should create a deep Ulcer. After the Cruft is remov'd, we apply Digestives and Cleansers as in other Cases.

CHAP. IV.

Of Dislocations.

THe Bones design'd for Motion are receiv'd into Cavities call'd *Sinus's*, and fasten'd to 'em by Ligaments, Tendons, or Muscles: And when the Head of any Bone is justled out of its proper *Sinus*, 'tis call'd a Dislocation. The Causes are generally external; tho' sometimes a vicious Acid thickening the nutritious Juice that waters these Cavities, may straiten their Capacities, and so deny Admission to the Bone, as in the *Sciatica* and Gout; and sometimes a sharp saltish Catarrh, such as Scorbutical Persons are obnoxious to, by relaxating the nervous Ligaments may directly promote a Dislocation. When a Bone is put out of Joint, its Figure, Situation, Length and Inability to move, will discover it. Some Dislocations are call'd perfect, when the Bone is quite out of its place; others imperfect, when it sticks upon the side of its Cavity. The former is more difficult to cure than the latter. The Dislocation of the Thigh-bone, as it does not easily happen by reason of the extraordinary Strength of its Ligament; so 'tis hard to cure, the Muscles being very thick, and the Part in a manner inaccessible. But that of the small Bones about the Ankle is much more dangerous, they being surrounded with many Tendons, which, when they're misplac'd, are apt to create grievous Pain, Inflammations, Convulsions, &c.

When a Bone is ſet, let the contracted Muſcles be extended to their due Length, and the whole Member be conveniently ty'd faſt with broad or narrow Swathes, as its Nature requires, remembring ſtill not to tie it too hard, nor to apply Aſtringents, (as moſt Surgeons are wont to do) leſt the Stagnation of the Blood or Serum ſhould occaſion Inflammations or Tumors. If the Part be much inflam'd, we muſt not pretend to extend it, or to ſet the Bone, till the Inflammation be abated by the following Decoction.

Take of the Tops of St. *John*'s-wort, a handful and a half; of the Herbs, Betony, Chamomil, and Roſemary, of each a handful; Comfrey-roots, three ounces; Roots of round-rooted Birth-wort, ſix drams; the four large hot Seeds, of each an ounce and a half. Boil them in Water, and add to a pound and a half of the ſtrain'd Liquor, ſix ounces of Wine, in which Sage has been infus'd. Mix and foment the Part, and after 'tis ty'd up, wet the Swathes with a Spunge dipp'd into it. If the Pain be exceſſive, we may add Poppy-heads to the Decoction. In the mean while give internally volatil Alkalies and fix'd Diaphoretics, for preventing the Stagnation of the Blood.

If a white Swelling invade the Part, either before or after the Bone is ſet, anoint it with the diſtill'd of Oil of Tartar, or of Mans-bones rectify'd with burnt Hartſhorn. However, in all Caſes let expreſs'd Oils and aſtringent Cataplaſms be avoided; the former ſhut the Pores and relaxat the Fibres; and the latter cauſe Inflammations and Tumors. The common Plea for Aſtringents is, that they ſtrengthen the Fibres: Whereas the Fibres are much more benefited by fomenting 'em with aromatic and nervous Decoctions, and applying cephalic Plaiſters of Amber, Elemi, Balſam of *Peru*, &c. If the Diſlocation be caus'd by the internal Coagulation of the nutritious Juice of the Joint, 'tis incurable, unleſs Mercury give relief. If it be only threaten'd, we endeavour to prevent it by giving inwardly the volatil Preparations of Tartar, eſpecially its Spirit prepar'd from Tartar fermented with its own Alkali; to which we may add Sal Armoniac, and the Spirit and volatil Salt of Mans-bones. Externally we apply the Spirit of Earth-worms mix'd with Spirit of Sal Armoniac; and in a word, whatever was recommended for the *Sciatica*. Particularly the following Oil,

Take of the diſtill'd Oil of Mans-bones, one part; fœtid Oil of Tartar, two parts. Mix 'em with Quick-lime, and diſtil, thro' a Retort, a moſt penetrating Oil.

If

If the Relaxation of the Ligaments occasion'd by a saltish Serum threaten a Dislocation, administer inwardly *Poterius*'s diaphoretic Gold, the Spirit of Earth-worms, Essence of Sassafras, and *Sal Volatile Oleosum*; and rub exernally with the Spirit of Earth-worms and the Oil of Earth, applying a Plaister of Tacamahac and Caran soften'd with the Oil of Amber, or *Crollius*'s Styptic Plaister mix'd with Stone-oil.

CHAP. V.

Of Fractures.

BOnes are broken mostly by external Causes; tho' there are some uncommon Instances of Fractures occasion'd by violent internal Convulsions. Some Fractures come across the Bone, and frequently cause Splinters, which gall the nervous Parts most sensibly; and sometimes wound the Skin. They are easily discover'd by their extreme Pain, loss of Motion, the Contraction and Distortion of the muscular Fibres, the Inflammations and soft Swellings of the Part, and by feeling with one's Fingers, especially if the Bone be out of its place. But the Inflammations that attend 'em at first, ought to be distinguish'd from the *Erysipelas* that sometimes appears about the fourth Day, being usher'd in by Shiverings, and accompany'd by a Fever, as arising from the growing Acidity of the nutritious Juices of the injur'd Membrans, which provoke 'em to Contractions, and so awake all the Juices in the Body. Other Fractures are more properly *Fissures*, *viz.* When the Bone is split lengthways. The Symptoms of a *Fissure* are these. A profound Pain gradually seizes the Bone, but 'tis still capable of performing its wonted Offices: Afterwards a small reddish Tumor appears, especially if the *Fissure* be great; the nutritious Juice of the Bone runs out of the Cleft, and glides along the Member, till the Tendons about the Joints thwart its Passage, and oblige it to stagnat, and so become an Ulcer. In the mean while the Bone it self where 'tis split, becomes rotten, and feeds the Ulcer with continual Supplies of corrupt Matter tho' at some distance. Therefore a Surgeon ought to be very cautious in all Ulcers lying near the Joints, to examin the Bone narrowly, and inquire after the above-mention'd Symptoms, since Ulaers proceeding from *Fissures* can never be cur'd, 'till the distant Cause be trac'd out and accounted for.

As

As touching Prognoſtics: Fractures in the middle of the Bone without Wounds or Splinters, are more favourable than thoſe about the Joints, or where the two joining Bones are both broke, or where the Bone is beaten to pieces, and the Wounds, whether occult or manifeſt, threaten Ulcers. Fractures about tendonous Places are very dangerous. The Bones of the Thigh ſeldom conſolidat, being cloſely block'd up by bulky Muſcles. The time of the Re-union of broken Bones is uncertain as depending upon the difference of Ages and Conſtitutions. Women with Child are not eaſily cur'd, but after Delivery their Cure ſucceeds.

When a Bone is broken acroſs, 'tis the Surgeon's Office to extend the Member, and join the two Ends together, faſtening 'em with proper Ligatures, and ordering an eaſie Poſture of the Part according to the Cuſtom of the Patient. Thus the two Ends of the broken Bone being laid together, the nutritious Juice will ſtagnat betwixt 'em, and gradually harden into a Subſtance of equal Conſiſtence joining 'em together. If the Part be inflam'd, nothing can be attempted towards ſetting, till the Inflammation be remov'd. After 'tis ſet, bathe it with the Spirit of Wine mix'd with a third part of Earth-worms, diſtill'd Oil of Roſemary, and the Oil of Man's Fat rectify'd upon Man's Bones; applying afterwards a Plaiſter of Tacamahac ſoften'd with the diſtill'd Oil of Roſemary; or the common Plaiſter of white Roſin, Turpentin, Pouders of Snakeweed and Birthwort-roots, the Extract of round-rooted Birth-wort prepar'd with Spirit of Wine, and diſtill'd Oil of Amber. The Plaiſter muſt be ſo applied that its two Ends do not come quite together, leſt they ſhould ſuppreſs the Swelling that always happens. If the Part be bruis'd, apply Hony with the Spirit of Wine. After the Plaiſter is applied, tye it down with Swathes and Splents, but the Swathes muſt not be too hard tied, nor the Splents too many. Aſtringent Cataplaſms are generally us'd but to the detriment of the Patient. If Cataplaſms are demanded, let 'em be made of the Leaves of the Herb *Robert* bruis'd, or of the Pouder of Snakeweed-roots with Wine.

In the mean while 'twill be proper to exhibit inwardly vulnerary Decoctions, eſpecially of Roſemary, Agrimony, Savin, and the Herb *Robert*. The Stone call'd *Oſteocolla*, given to a dram in Wine or Vinegar; is of ſingular uſe.

As for *Fiſſures*; the divided Parts of the Bone muſt be join'd, the above-mention'd Plaiſter applied, and the Member tied up with Swathes. If a Tumor beſet the Part, let it

be

be open'd, and treated as a Fracture with a Wound. If an Ulcer happen, lay it open to the very *Fissure*, and cleanse the rotten Bone and Ulcer as above.

If a Fracture be attended by a Wound, it must be kept open for some time, to give vent to the pieces of Bones that do not consolidate with the rest. If the Bone hang out at the Wound, and be not tainted by the Air, it ought to be put into its proper place; if otherwise, it must be saw'd off, or otherwise separated. The Separation may be promoted by the following Liniment.

Take of Aloes and Myrrh, of each half a dram; Comfry and Birthwort-roots, of each three drams; *Euphorbium*, two drams: With Turpentin and Wax make a Liniment.

Sometimes the Callus which joines the Bones is too bulky, and causes a Deformity, which may be help'd while 'tis soft and green; but if it be confirm'd, there's no relief: For if a new Fracture be endeavour'd, it will not fall upon the Calus, but near to it.

CHAP. VI.

Of a Gangrene and Sphacelus.

A Gangrene and *Sphacelus* differ only gradually; the former being an imperfect, the latter a perfect Mortification. They are equally the Consequents of all the preceding Disorders, *viz.* Tumors, Wounds, Ulcers, Dislocations and Fractures; and therefore seem to claim a peculiar Chapter to themselves. Their immediate Cause is a prevailing Alkali that destroys the innate volatil Acid, and dissolves its Sulphur. The remote Causes are, whatever prevents the Influx and Circulation of the Blood and Animal Spirits, which are wont to recruit the volatil Acid, as Ligatures, Bruises, Wounds, Cold, or the sudden Contraction of the Pores, Poyson, malignant Diseases, &c. The Symptoms are these: At first the Arteries beat very high in the Part, but the Pulsation, Heat and Sense dwindle gradually away; the Muscles become soft and flaccid, and separate, as it were, from the Skin, the Colour of which becomes pale, blew, and at length black. If an Ulcer degenerat into a Gangrene, it voids no corrupt Matter; or if there be any, 'tis discolour'd and fœtid. If a Gangrene proceed from an internal Cause, 'tis incurable; for tho' the Part be cut off, 'twill revive elsewhere. Nervous Parts are more liable, and more difficult to cure, than the sanguine.

guine. Sometimes a Tendon, when ſeiz'd by a Gangrene, may be mov'd by the Muſcle, which being long and at ſome diſtance is not touch'd, and therefore Motion is no certain ſign of a ſound Part.

For Cure. In a *Sphacelus* the mortified Part muſt be cut off. In a recent Gangrene, we muſt prevent its progreſs; internally by exhibiting the Spirit of Triacle camphoris'd, Spirit of Wine camphoris'd, Spirit of Juniper-berries, Spirit of Hartſhorn, *&c.* and externally by applying the Spirit of Wine camphoris'd, mix'd with Myrrh, Aloes and Frankincenſe; or the Decoction of Quick-lime mix'd with Spirit of Wine, and Sweet Mercury; or the Decoction of the Droſs of Antimony in Vinegar; or the Decoction of Lupines with White-wine, Lye and Saffron. Cataplaſms of Germander, Wormwood, Hyſſop, Sage, Agrimony, *&c.* boil'd in Lime-water, and Clouts dipp'd in the Decoction of the *Caput Mortuum* of *Aqua-fortis* in Roſe-water, are alſo much commended. If the Gangrene be far advanc'd, let the Part be ſcarify'd, and waſh'd with the following Mixture.

Take of Pickle, four ounces; Spirit of Wine camphoris'd, two ounces; Ointment *Ægyptiacum*, an ounce. Mix, *&c.* After 'tis waſh'd apply the Butter of Antimony, or ſublimat Mercury, with Myrrh, Aloes, Allum, and the *Caput Mortuum* of Vitriol, or precipitat Mercury boil'd with the Oil of Nuts. Some extol the following Cataplaſm.

Take of Wormwood-tops, Chamomil, and Elder-flowers, of each a handful and a half; of the Herb Germander, a handful and a half; Rue, half a handful; Horſe-dung, three ounces. Boil them in Pickle, adding towards the end two ounces of Ink, and three ounces of the Spirit of Wine.

In a *Sphacelus* the mortified Part muſt be cut off with all convenient ſpeed, without waiting (as ſome do) till it come to the Joint. Some perform Amputations with red hot Inſtruments, thinking thereby to prevent the exceſſive bleeding; others are content with cold Inſtruments, and ſtop the bleeding with the Powder of Hogs-dung, and dulcify'd Earth of Vitriol; or with Clouts dipp'd into a Mixture of the Vitriol of Steel and Allum with the Juice of Plantain.

FINIS.

29 MA 65